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DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI	l25 and vaccine$	2	L26
USPT,JPAB,EPAB,DWPI	5872005.pn.	2	L25
USPT,JPAB,EPAB,DWPI	adeno-associated$ near5 vaccine$1	12	L24
USPT,JPAB,EPAB,DWPI	adeno$ near5 vaccine$1	259	L23
USPT,JPAB,EPAB,DWPI	l21 and adeno$	13	L22
USPT,JPAB,EPAB,DWPI	l20 and vector$	54	L21
USPT,JPAB,EPAB,DWPI	l19 and vaccine$1	77	L20
USPT,JPAB,EPAB,DWPI	papilloma$ near10 "l2"	111	L19
USPT,JPAB,EPAB,DWPI	l17 same papilloma$	27	L18
USPT,JPAB,EPAB,DWPI	fusion adj1 (peptide$1 or polypeptide$1)	2184	L17
USPT,JPAB,EPAB,DWPI	((adeno-associated adj3 vector) near20 vaccine$)	11	L16
USPT,JPAB,EPAB,DWPI	adeno-associated near10 vaccine$	18	L15
USPT,JPAB,EPAB,DWPI	adeno-associated near5 papilloma$	59	L14
USPT,JPAB,EPAB,DWPI	adeno-associated near10 papilloma$	126	L13
USPT,JPAB,EPAB,DWPI	adeno-associated near15 papilloma$	133	L12
USPT,JPAB,EPAB,DWPI	adeno-associated same papilloma$	165	L11
USPT,JPAB,EPAB,DWPI	adeno-associated and papilloma$	401	L10
USPT,JPAB,EPAB,DWPI	aav and l1	0	L9
USPT,JPAB,EPAB,DWPI	l1 and ("l1" or "l2")	95	L8
USPT,JPAB,EPAB,DWPI	l6 and vaccine	22	L7
USPT,JPAB,EPAB,DWPI	l5 and papilloma$	35	L6
USPT,JPAB,EPAB,DWPI	gissmann-l$.in.	39	L5
USPT,JPAB,EPAB,DWPI	gissman-l$.in.	0	L4
USPT,JPAB,EPAB,DWPI	l1 same orf	2	L3
USPT,JPAB,EPAB,DWPI	l1 near10 orf	0	L2
USPT,JPAB,EPAB,DWPI	papilloma$ near10 vaccine	160	L1

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS
AN 2000:359342 CAPLUS
DN 133:99254
TI Preclinical study on gene therapy of cervical carcinoma using adeno-associated virus vectors
AU Funke, David; Grimm, Dirk; Denger, Stefanie; Kreuzer, Jorg; Delius, Hajo; Komitowski, Dymitr; **Kleinschmidt, Jurgen A.**
CS Deutsches Krebsforschungszentrum, Forschungsschwerpunkt Angewandte Tumorvirologie, Heidelberg, D-69120, Germany
SO Cancer Gene Ther. (2000), 7(5), 766-777
CODEN: CGTHEG; ISSN: 0929-1903
PB Nature America Inc.
DT Journal
LA English
RE.CNT 62
RE
(2) Alvarez-Salas, L; Proc Natl Acad Sci USA 1998, V95, P1189 CAPLUS
(3) Bottazzi, B; J Immunol 1992, V148, P1280 CAPLUS
(4) Chatterjee, S; Methods 1993, V5, P51 CAPLUS
(5) Chomczynski, P; Anal Biochem 1987, V162, P156 CAPLUS
(6) Conrad, C; Gene Ther 1996, V3, P658 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 7 MEDLINE DUPLICATE 3
AN 93378357 MEDLINE
DN 93378357
TI Immune response to genital **papillomavirus** infections in women. Prospects for the development of a **vaccine** against cervical cancer.
AU Gissmann L; **Jochmus I**; Nindl I; Muller M
CS Forschungsschwerpunkt Angewandte Tumorvirologie Deutsches Krebsforschungszentrum, Heidelberg, Germany.
SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1993 Aug 12) 690 80-5. Ref: 37
Journal code: 5NM. ISSN: 0077-8923.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; Cancer Journals
EM 199312

[illegible] Omnibus [illegible]
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FILE 'HOME' ENTERED AT [illegible] 23 JAN 2001

file medline

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ENTRY [illegible]
FULL ESTIMATED COST [illegible]

FILE 'MEDLINE' ENTERED AT 17:35:21 ON 23 JAN 2001

FILE LAST UPDATED: 27 OCT 2000 (20001027/UP). FILE COVERS 1960 TO DATE.

MEDLINE thesaurus (the CT, CT, and CT fields) incorporate the MeSH 2000 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment has continued data from 1960 through 1965.
Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the
Basic Index. See HELP SELECT for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
SUBSTANCE IDENTIFICATION.

MEDLINE UPDATES ARE [illegible] THE AFTER THE
ANNUAL RELOAD HAS BEEN [illegible].
COMPLETED DAILY. THE [illegible] THE RELOAD
IS COMPLETED AND
RECORDS WILL BE [illegible] THE [illegible] RELOAD.

s papilloma? and vaccine# ab,bi

21139 PAPILLOMA?
88249 VACCINE# BI
5453647 AB FA
36133 VACCINE# AB
(VACCINE# BI (L) AB FA)
88249 VACCINE# BI
L1 413 PAPILLOMA? AND VACCINE# AB,BI

s adeno-associated ab,bi

1900 ADENO BI
721297 ASSOCIATED BI
5453647 AB FA
830 ADENO-ASSOCIATED AB
((ADENO(W)ASSOCIATED) (L) AB FA)
1900 ADENO BI
721297 ASSOCIATED BI
967 ADENO-ASSOCIATED BI
(ADENO(W)ASSOCIATED) (L) BI
L2 967 ADENO-ASSOCIATED AND

l2 and vaccine# ab,bi

88249 VACCINE# BI
5453647 AB FA
36133 VACCINE# AB
(VACCINE# BI (L) AB FA)
88249 VACCINE# BI
L3 15 L2 AND VACCINE# AB,BI

s l1 and l3

L4 1 L1 AND L3

d bib ab

L4 ANSWER 1 OF 15 MEDLINE
AN 2000148983 MEDLINE
DN 20148983
TI Recombinant ***adeno*** - ***associated*** virus expressing human
papillomavirus type 16 E7 peptide DNA fused with heat shock
protein DNA as a potential ***vaccine*** for cervical cancer.
AU Ling D.W. Tsao Y.P. Fung L.T. Tung Y.A. Sytwu H.K. Xiao X. Chen S.L.
CS Department of Microbiology and Immunology, Taipei, Taiwan, Republic of
China.
SO Journal of Virology, (2000 Mar) 74 (6) 2888-94.
Journal code: [illegible]. ISSN: 0022-538X.
CY United States
DT Journal, Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals, Cancer Journals
EM 200006
EW 20000602
AB In this study, we explore a potential ***vaccine*** for human
papillomavirus (HPV)-induced tumors, using heat shock protein as
an adjuvant, a peptide ***vaccine*** for safety, and
adeno -
associated virus (AAV) as a gene delivery vector. The tumor
vaccine was devised by constructing a chimeric gene which
contained HPV type 16 E7 cytotoxic T-lymphocyte (CTL) epitope
DNA (7 to 1
Feltkamp, H. L. Smits, E. F. Vierboom, E. P. Ummels, P. C. de
Jongh, J.
W. Fleuren, J. ter Schegget, C. J. Melief, and W. M. Kast, Eur. J.
Immunol. 23:2242–2249, 1993) fused with the heat shock protein
gene as a
tumor ***vaccine*** delivered by AAV. Our results
demonstrate that
this ***vaccine*** can eliminate tumor cells in syngeneic
animals and
induce CD4- and CD8-dependent CTL activity in vitro. Moreover
studies
with knockout mice with distinct T-cell deficiencies confirm that
CTL-induced tumor protection is CD4 and CD8 dependent. Taken
together, the
evidence indicates that this chimeric gene delivered by AAV has
potential
as a cervical cancer ***vaccine***

d l3 1- bib ab

YOU HAVE REQUESTED DATA FROM FILE 'MEDLINE' - CONTINUE? Y (C)N

L2 ANSWER 1 OF 15 MEDLINE
AN 2000156789 MEDLINE
DN 20156789
TI An oral ***vaccine*** against [illegible] with efficacy in
experimental
stroke and epilepsy [see comments].
CM Comment in: Science 2000 Feb 25;287(5457):1379, 1381
AU During M.J. Symes C.W. Lawlor P.A. Lin J. Dunning J. Fitzsimons H.L.
Poulsen D. Leone P. Xu R. Dicker B.L. Lipski J. Young D.
CS Department of Neurosurgery and Medicine, and Department of
Physiology, University
of Auckland School of Medicine, Auckland, New Zealand.
matthew@ane.auckland.ac.nz
SO Science, (2000 Feb 25) 287 (5457) 1453-60.
Journal code: [illegible]. ISSN: 0036-8075.
CY United States
DT Journal, Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals, Cancer Journals
EM 200005
EW 20000503
AB The brain is generally considered immunoprivileged, although
increasing
examples of immunological responses to brain antigens, neuronal
expression
of major histocompatibility class I genes, and neurological
autoimmunity
have been recognized. An ***adeno*** - ***associated***
virus (AAV)
vaccine generated autoantibodies that targeted a specific
brain
protein, the GluR1 subunit of the N-methyl-D-aspartate (NMDA)
receptor.
After peroral administration of the AAV ***vaccine*** ,
transgene
expression persisted for at least 5 months and was associated with a

robust humoral response in the absence of a significant cell-mediated
response. These findings suggest that ***vaccine*** may be associated with strong
anti-epileptic and neuroprotective activity in rats for both a kainate-induced seizure model and a middle cerebral artery occlusion
stroke model at 1 to 5 months following vaccination. Thus, a vaccination
strategy targeting brain proteins is feasible and may have therapeutic
potential for neurological disorders.

L3 AN 2000148983 MEDLINE
AN 2000148983 MEDLINE
DN 20148983
TI Recombinant ***adeno*** - ***associated*** virus expressing human
papillomavirus type 16 E7 peptide DNA fused with heat shock protein DNA as
a potential ***vaccine*** for cervical cancer.
AU Liu D W; Tsao Y P; Kung J T; Ding D C; Wang P N; Chen S L
CS Department of Microbiology and Immunology, Taipei, Taiwan, Republic of
China
SO JOURNAL OF VIROLOGY, (2000 Mar) 74 (6) 2888-94
Journal code: KCV. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 200006
EW 20000602
AB In this study, we explore a potential ***vaccine*** for human
papillomavirus (HPV) induced tumors, using heat shock protein as an
adjuvant, a peptide ***vaccine*** for safety, and ***adeno*** -
associated virus (AAV) as a gene delivery vector. The tumor
vaccine was devised by constructing a chimeric gene which
contained HPV type 16 E7 cytotoxic T-lymphocyte (CTL) epitope DNA (M. C.
Feltkamp, H. L. Smits, M. P. Vierboom, R. P. Minnaar, B. M. de Jongh, J.
W. Drijfhout, J. ter Schegget, C. J. Melief, and W. M. Kast, Eur. J.
Immunol. 23:2242-2249, 1993) fused with the heat shock protein gene as a
tumor ***vaccine*** delivered via AAV. Our results demonstrate that
this ***vaccine*** can eliminate tumor cells in syngeneic animals and
induce CD4- and CD8-dependent CTL activity in vitro. Moreover, studies
with knockout mice with distinct T-cell deficiencies confirm that
CTL-induced tumor protection is CD4 and CD8 dependent. Taken together, the
evidence indicates that this chimeric gene delivered by AAV has potential
as a cervical cancer ***vaccine***.

L3 AN 97338174 MEDLINE
AN 97338174 MEDLINE
DN 97338174
TI Gene modification of primary tumor cells for active immunotherapy of human
breast and ovarian cancer.
AU Philip R; Clay T; Jeannette L; Lalos J; Lange S; Search J; Tsai J.
Lebkowski J; Lyerly H K; Philip M
CS [illegible] 92054-1114, USA
SO [illegible]
Journal code: [illegible]
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199904
EW 19990402
AB We have previously shown that cationic liposomes facilitate ***adeno***
associated virus (AAV) plasmid transfections of primary and
cultured cell types. To test the clinical feasibility of using genetically
modified tumor ***vaccines*** for the treatment of breast and ovarian
cancers, we have constructed an expression plasmid pMP6IL2 and
investigated the use of liposome-mediated gene delivery into primary,
uncultured human breast and ovarian tumor cells to produce interleukin 2
(IL-2)-secreting tumor cells. We have demonstrated significant levels of
IL-2 expression in tumor cell lines and primary breast and ovarian tumor
cells using this AAV-based expression plasmid complexed to cationic
liposomes. Transfections with the non-AAV plasmid containing the identical
expression cassette as the AAV plasmid induced IL-2 expression in the
tumor cell line but failed to produce IL-2 in primary tumor cells.
Significant levels of IL-2 were induced with the AAV plasmid regardless of
liposome composition used for transfection. The transfected breast cell
line and primary tumor cells were able to express the transgene product
for up to 28 days after lethal radiation. The transfection efficiency was
comparable for both the tumor cell line and primary tumor cells and ranged
from 2% to 6% of the cell types analyzed by intracellular IL-2
staining. Although the primary tumor cell preparations consist of mixed
populations of cells, at least 40% of the tumor cells expressed the
transgene as assessed by immunostaining for IL-2. The ability to
efficiently express the gene in freshly isolated nondividing tumor
cells may potentiate active immunotherapy strategies for gene-based cancer
treatment.

L3 AN 1998299454 MEDLINE
AN 1998299454 MEDLINE
DN 98299454
TI The use of recombinant ***adeno*** ***associated*** viral vectors
for the transduction of epithelial tumor cells.
AU Eberert M; Bogedain C; Scheer N; Heberger C; Stevrer S; Burger A; Maass G
CS [illegible] Munchen-Martinsried, Germany
SO INTERNATIONAL JOURNAL OF EXPERIMENTAL PATHOLOGY, (1997 Sep-Oct) 78 (5) 403-9
Journal code: GRI. ISSN: 0959-9673.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199811
EW 19981103
AB Using high titer recombinant ***adeno*** - ***associated*** viral
vectors (rAAV), we have investigated the feasibility of cancer
vaccines from tumor explants. In a first set of experiments, rAAV
vectors expressing firefly luciferase reporter genes were used to
transduce different human tumor cell lines. At day three post
transduction all of the human tumor cell lines tested showed high levels
of luciferase expression. To further evaluate rAAV-mediated gene transfer
efficiency into primary tumor cells, we transduced freshly isolated tumor
cells from malignant melanoma and ovarian carcinoma patients. As a
remarkable result, reporter gene expression in primary tumor cells was
significantly higher than in the tested established tumor cell lines.
These data could also be reproduced with a rAAV lacZ vector, since the
portion of successfully transduced primary tumor was higher than 90%.
Taken together, our data demonstrate that rAAV-mediated gene transfer is a
very efficient method for the transduction of freshly isolated human tumor

cells and may allow the generation of potent autologous cancer ***vaccines***

L3 ANSWER [illegible] OF 15 MEDLINE
AN [illegible]
DN [illegible]
TI Recombinant ***adeno*** - ***associated*** virus for the generation
of autologous, gene-modified tumor ***vaccines***: evidence for a high
transduction efficiency into primary epithelial cancer cells
AU [illegible]
Braun-Falco M, Volkenandt
CS [illegible]
Hallek M
CS Medigene AG, Martinsried, Munich, Germany.
SO [illegible]
Journal code: A12; ISSN: 1043-0342
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199810
EW 19981002
AB To explore the potential of recombinant vectors based on recombinant
adeno - ***associated*** virus (rAAV) for cancer vaccination, we
investigated the transduction efficiency of rAAV into cancer cells ex
vivo. Infection of human epithelial cancer cell lines with rAAV carrying
reporter genes encoding beta galactosidase (rAAV LacZ) or luciferase
(rAAV Luc) resulted in high levels of reporter gene expression (> 90%
positive cells). In marked contrast, rAAV poorly transduced all murine
tumor cell lines, as well as human hematopoietic cell lines. Either
irradiation or adenovirus infection of tumor cells prior to rAAV infection
induced a 10- to 100-fold increase of reporter gene expression. To
determine the transduction efficiency of rAAV into primary cancer cells,
freshly isolated, irradiated tumor cells from malignant melanoma and
ovarian carcinoma patients were infected with rAAV Luc, resulting in up to
6.9-fold higher levels of gene expression than in a HeLa tumor cell line.
Time course experiments with freshly isolated tumor cells infected with
rAAV Luc showed maximal levels of luciferase expression between days 3 and
9 posttransduction. Simultaneous infection of primary tumor cells with up
to three rAAV vectors containing genes encoding the

immunostimulatory
proteins IL-12 (p35 + p40 subunit of IL-12 and p40 subunit of IL-12
[illegible] expression of IL-12 in more than 90% of the tumor cells.
and [illegible] high levels of IL-12. Taken together, our results
demonstrate that rAAV efficiently transduces freshly isolated human
epithelial tumor cells and might therefore be a potent tool to produce
improved, gene-modified cancer ***vaccines***

L3 ANSWER [illegible] OF 15 MEDLINE
AN 97456573 MEDLINE
DN 97456573
TI Selective immunization with ***adeno*** - ***associated*** virus
vectors expressing herpes simplex virus type 2 glycoproteins B and
D.
AU Manning W C, Paliard X, Zhou S, Fat Bland M, Lee A Y, Hong K, Walker C M.
Escobedo J A, Dwarki V.
CS Chiron Corporation, Emeryville, California 94608, USA.
william_manning@ccc.chiron.com
SO JOURNAL OF VIROLOGY, (1997 Oct) 71 (10) 7960-2.
Journal code: K3V; ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199712
EW 19971204
AB Intramuscular injection of mice with an ***adeno*** - ***associated***
virus (AAV) vector expressing herpes simplex virus type 2 glycoprotein B
led to the generation of both gB-specific major histocompatibility complex
class I-restricted cytotoxic T lymphocytes and anti-gB antibody.
AAV-mediated immunization was more potent than plasmid DNA or protein in
generating antibody responses.

L3 ANSWER [illegible] OF 15 MEDLINE
AN 97333610 MEDLINE
DN 97333610
TI Construction and biological characterization of an interleukin-12
fusion
protein (Flexi-12): delivery to acute myeloid leukemic blasts using
adeno - ***associated*** virus.
AU Anderson K, Macdonald I A, Corbett T, Hacking D, Lowdell M W,
Prentice H G.
CS Department of Haematology, Royal Free Hospital School of Medicine,
Hampstead, London, UK.
SO [illegible]
Journal code: A12; ISSN: 1043-0342.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199710
EW 19971005
AB Interleukin-12 (IL-12) is a cytokine that exhibits pleiotropic effects on
lymphocytes and natural killer cells and has been shown to have promise
for the immunotherapy of cancer. The combination of the immune
costimulatory molecule B7.1 and IL-12 has been shown to be synergistic for
T cell activation. By transfecting tumor cells with both IL-12 and B7.1
cDNAs, it may be possible to use these modified targets as
vaccines. A major obstacle in designing a vector to deliver these
genes results from the structure of IL-12. Functional IL-12 is a
heterodimer composed of two distinct subunits that are encoded by separate
genes on different chromosomes. Production of functional IL-12 requires
the coordinated expression of both genes. This presents several problems
in vectors, particularly those in which additional genes, either a
co-stimulatory gene or a selectable marker, are inserted. Therefore, we
have constructed a single cDNA that encodes a single-chain protein, called
Flexi-12, which retains all of the biological characteristics of
recombinant IL-12 (rIL-12). The monomeric polypeptide Flexi-12 is able to
induce the proliferation of phytohemagglutinin (PHA) blasts, induce PHA
blasts to secrete interferon gamma (IFN-gamma) and additionally, by
preincubation, enhance the killing of K562 targets by PBLs. These
phenomena are in a dose-dependent manner comparable to that seen with
rIL-12. We have also shown that tyrosine phosphorylation of the STAT 4
transcription factor, which has been shown to be unique to the IL-12
signaling pathway, occurs with Flexi-12 at levels similar to those seen
with rIL-12. We have packaged Flexi-12 into a recombinant ***adeno*** -
associated virus (AAV) and used this vector to infect acute
myeloid leukemic (AML) blasts. Infected AML blasts produced between 2 and
6 ng of IL-12 p70/ml cells per ml per 48 hr. These studies also confirm
that AAV is an efficient delivery vehicle for cytokines to leukemic cells

Direct anal[illegible] ***vaccines*** is underway.

[illegible]
AN 97250080
DN 97250080
TI Active immunization with tumor cells transduced by a novel AAV plasmid-based gene delivery system.
AU Clary B.M.; Morse M.
Gilboa E.; Lyerly H.K.
CS Department of Surgery, Duke University Medical Center, Durham, North
Carolina 27710, USA
NC HL07671-05 (NHLBI)
SO JOURNAL OF IMMUNOTHERAPY (1997 Jan) 20 (1) 26-37.
Journal code: CUQ.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199708
AB EX vivo genetically engineered cytokine-secreting tumor cell ***vaccines*** have been shown to prevent metastatic disease in animal models of lung and breast cancer. Because of the inefficiency of existing models of gene delivery in transducing primary human tumor cells it has been difficult to clinically apply this strategy. In this study, liposome-mediated delivery of an ***adeno*** - ***associated*** virus (AAV)-based plasmid containing the sequence for murine gamma-interferon (gamma-IFN) (pMP6A-mIFN gamma) was used to generate cytokine-secreting murine tumor cell ***vaccines***. High levels of gamma-IFN and elevated class I major histocompatibility complex expression after transfer of pMP6A-mIFN-gamma into the murine lung cancer cell line, D122, was demonstrated. The efficiency of gene transfer was determined by two different methods and was estimated to be 10-15%. Irradiated gamma-IFN D122 cells generated by this novel gene delivery system (D122 pMP6A-mIFN gamma) and also by standard retroviral methods (DIF2) were administered as weekly vaccinations by intraperitoneal injection to animals bearing 7-day-old intrafootpad D122 tumors. Hindlimb amputation was performed when footpad diameters reached 7 mm, and lungs were harvested 28 days later. Animals vaccinated with gamma-IFN secreting D122 [illegible] transduced by AAV-based plasmids delivery demonstrated a significant delay in footpad tumor growth when compared with controls and DIF2 cells [illegible] D122 pMP6A mIFN gamma were free of pulmonary metastases 60 days after amputation. A significant improved from the 0, 7, and 15% observed in animals vaccinated with irradiated parental D122 cells, irradiated D122 cells lipofected with an empty-cassette vector (pMP6A), or DIF2 cells, respectively. These results and the ability to transfer genes with this delivery system to a broad range of tumor [illegible] in the generation of cytokine-secreting tumor cell vaccinations for use in clinical trials.

L3 ANSWER 9 OF 15 MEDLINE
AN 96250351 MEDLINE
DN 96350351
TI Active immunotherapy with transiently transfected cytokine-secreting tumor cells inhibits breast cancer metastases in tumor-bearing animals.
AU Clayberg L.; Clary B.; Lieberman J.; Lyerly K.
CS Department of Surgery, Duke University Medical Center, Durham, N.C. 27710, USA.
SO SURGERY (1996 Aug) 120 (2) 265-72; discussion 272-3.
Journal code: VCS; ISSN: 0039-6060.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 199612
AB BACKGROUND: Metastatic disease remains the most frequent cause of treatment failure in the management of patients with breast cancer. A novel method that allows delivery of a gene into primary tumor cells was used to generate tumor cell ***vaccines*** to inhibit metastasis formation in tumor-bearing hosts. METHODS: Inoculation of 2.5 x 10(4) 4T1 murine breast cancer cells into the footpads of BALB/c mice reliably leads to tumor growth and pulmonary metastases. Interleukin-2 (IL-2)-secreting 4T1 cells (4T1-pMP6A IL-2) and control transduced 4T1 cells (4T1-pMP6A) were generated by lipofection with a cationic liposome complexed to an ***adeno*** - ***associated*** viral plasmid bearing the IL-2 gene (pMP6A IL-2). Unmodified 4T1 cells were inoculated into the footpads on day 0, and weekly immunization with phosphate-buffered saline solution or 2 x 10(6) irradiated 4T1, 4T1-pMP6A, or 4T1-pMP6A IL-2 cells commenced on day 21. Hindlimb amputation was performed when tumors measured 6 mm in [illegible] RESULTS: A significant reduction was seen in the pulmonary metastatic load of mice receiving IL-2 gene-modified tumor cell immunization (4T1 pMP6A IL-2) when compared with mice given control immunizations [illegible]. These results suggest that active immunization strategies with cytokine gene-modified tumor cells generated by clinically relevant gene delivery systems may prove useful in inhibiting the development of metastases from primary breast cancer.

L3 ANSWER 10 OF 15 MEDLINE
AN 96249457 MEDLINE
DN 96249457
TI High-efficiency transfer of the T cell co-stimulatory molecule B7-2 to lymphoid cells using high titer recombinant ***adeno*** - ***associated*** virus vectors.
AU Chiorini J.A.; Wendtner C.M.; Urcelay E.; Safer B.; Hallek M.; Kotin R.M.
CS Molecular Hematology Branch, Nat. and Heart, Lung, and Blood Institute, Bethesda, MD 20892.
SO HUMAN GENE THERAPY. (1995 Dec) 6 (12) 1531-41.
Journal code: A12; ISSN: 1043-0342.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199610
AB ***Adeno*** - ***associated*** virus (AAV) is a single stranded DNA virus that can either integrate or replicate in host cells. Production of recombinant viral particles (rAAV) requires expression of the viral structural genes and the viral inverted terminal repeats in cis. By using an SV40 replicon to amplify the structural genes, the yield of recombinant viral particles was increased 60-fold over a nonreplicating helper plasmid. The rAAV particles produced by this system have similar physical properties to wild-type particles, including buoyant density, size, and morphology. This novel rAAV packaging system was used to produce rAAV

particles that contain the gene for the T cell co-stimulatory protein B7-2. Transduction of the human metastatic breast adenocarcinoma cell line LP-1 with these particles significantly increased the percentage of cells expressing B7-2 from 0.8% to 29.6%. Expression of B7-2 in the human lymphoid cell line Ramos (a monoclonal antibody directed). Targeting of tumor cells grown in subcutaneous matrigel using other viral or nonviral vector systems. Optimization of packaging system for recombinant AAV should allow gene transfer of sufficient quantities of B7-2 containing particles to develop tumor ***vaccines*** for non-Hodgkin's lymphoma

L3 ANSWER 11 OF 15 MEDLINE
AN 96135350 MEDLINE
DN 96135350
TI Adenovirus and ***adeno***-***associated*** virus inverted vectors for gene therapy
AU Berns K I; Giraud C
CS Department of Microbiology, Herbert Microbiology Research Center, Cornell University Medical College, New York, New York, 10021, USA.
GR AI22251 (NIAID)
GM50032
SO ADVANCES IN VIROLOGY, ACADEMIC PRESS (1995 Nov 27) 772 95-104.
Ref: 48
Journal code: 8XM. ISSN: 0077-8923
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; Cancer Journals
EM 199604

L3 ANSWER 12 OF 15 MEDLINE
AN 95277714 MEDLINE
DN 95277714
TI Efficient gene transfer with ***adeno***-***associated*** virus-based plasmids complexed to cationic liposomes for gene therapy of human prostate cancer
AU Vieweg J; Boczkowski D; Dahm P; Rosenberg M; Edwards D W; Philip M; Philip R; Rudoll T; Smith C; Robertson C; Gilboa E
CS Department of Surgery, Duke University Medical Center, Durham, North Carolina 27710, USA.
NC CA 58192 (NCI)

SO CANCER RESEARCH (1995 Jun 1) 55 (11) 2366-72
Journal code: CAN. ISSN: 0008-5472
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199508
AB We have shown that treatment of rats bearing the Dunning R3327 MatLyLu prostatic tumor with human interleukin 2 (IL-2) gene-modified tumor cell preparations induces potent antitumor immunity in the animal. To test the clinical feasibility of using genetically modified tumor ***vaccines*** for the treatment of prostate cancer, we have explored the use of a simplified gene delivery system based on liposomes to introduce and express the IL-2 gene in the Dunning rat R3327 MatLyLu prostatic tumor cell line (MatLyLu) and in short-term cultures of primary human prostatic tumor cells. Liposome complexed recombinant ***adeno***-***associated*** virus inverted terminal repeats exhibited 3-10-fold higher levels of gene transfer and IL-2 expression than did liposome complexes with non-***adeno***-***associated*** virus containing plasmids. Single transfections resulted in IL-2 expression for an extended period of time that exceeded several-fold the amount of IL-2 secreted from retrovirally transduced MatLyLu cells. X-irradiation of cells (4000 rads) prior to transfection did not affect cytokine secretion, indicating that liposome-mediated gene transfer does not depend on cell proliferation. High levels of gene transfer and IL-2 expression were also achieved in short-term cultures of primary human prostatic tumor cells established from tumor specimens obtained following radical prostatectomy of cancer patients. Depending on the type of liposome used, IL-2 levels secreted from the human prostatic tumor cells were comparable to or exceeded the levels of IL-2 secreted from retrovirally transduced MatLyLu cells, which induced antitumor immunity in the rat model. The ability to culture and expand ex vivo human prostatic tumor cells, and the use of a simple and highly efficient gene transfer method to generate genetically modified tumor ***vaccines***, set the stage for clinical exploration of gene-based immunotherapy of prostate cancer.

L3 ANSWER 13 OF 15 MEDLINE
AN 94187712 MEDLINE
DN 94187712
TI Efficient and sustained gene expression in primary T lymphocytes and primary and cultured tumor cells mediated by ***adeno***-***associated*** virus plasmid DNA complexed to cationic liposomes.
AU Fahy E; Flotte T; Dong G; Sobol R; Boucher R C; Hutnagel T; Wilson J M; Gerard R D
CS Applied Immune Sciences, Inc., Santa Clara, California 95054.
SO MOLECULAR AND CELLULAR BIOLOGY (1994 Apr) 14 (4) 2411-8
Journal code: MCB. ISSN: 0270-7306.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199405
AB We have used cationic liposomes to facilitate ***adeno***-***associated*** virus (AAV) plasmid transfections of primary and cultured cell types. AAV plasmid DNA complexed with liposomes showed levels of expression several fold higher than those with plasmid DNA complexed with standard plasmids. In addition, long-term expression (> 30 days) of the gene, unlike the transient expression demonstrated by typical liposome-mediated transfection with standard plasmids, was observed. Southern analysis of chromosomal DNA further substantiated the hypothesis that the long-term expression was due to the presence of the transgene in the AAV plasmid-transfected group and not in the standard plasmid-transfected group. AAV plasmid-liposome complexes induced levels of transgene expression comparable to those obtained by recombinant AAV transduction. Primary breast, ovarian, and lung tumor cells were transfectable with the AAV plasmid DNA-liposome complexes. Transfected primary and cultured tumor cells were able to express transgene product even after lethal irradiation. High-level gene expression was also observed in freshly isolated CD3+, CD4+, and CD8+ T cells from normal human peripheral blood. Transfection efficiency ranged from 10 to 50% as assessed by intracellular interleukin 2 levels in interleukin-2-transfected cells. The ability to express transgenes in primary tumor and lymphoid cells may be applied toward tumor ***vaccine***

States) and
provide cells which may eventually permit highly specific modulation of the
cellular immune response in infected and cancer

L3 ANSWER [illegible]
AN 71132252 MEDLINE
DN 71132252
TI Defective [illegible] ***adeno*** - ***associated*** satellite
virus-antibody [illegible] vectors
Parks W.P.
Melnick J.L.
Journal code: [illegible] ISSN: 0022-1767
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197106

L3 ANSWER [illegible]
AN 69167166 MEDLINE
DN 69167166
TI Effect of ***adeno*** - ***associated*** viruses on the oncogenicity
of adenovirus 12
AU Rabinowitz Y.
CS [illegible]
SO CANCER CHEMOTHERAPY REPORTS. (1968 Dec) 29 433
Journal code: [illegible] ISSN: 0085-1921
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 196907

file medline embase biosis inpadoc caplus

COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 4.85 5.00

FILE 'MEDLINE' ENTERED AT 17:38:59 ON 25 JAN 2001

FILE 'EMBASE' ENTERED AT 17:38:59 ON 25 JAN 2001
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FILE 'BIOSIS' ENTERED AT 17:38:59 ON 25 JAN 2001
COPYRIGHT (C) 2001 BIOSIS(R)

FILE 'PATDPA' ENTERED AT 17:38:59 ON 25 JAN 2001
COPYRIGHT (C) 2001 European Patent Office, Vienna (EPO)

FILE 'CAPLUS' ENTERED AT 17:38:59 ON 25 JAN 2001

COPYRIGHT [illegible]
AGREEMENT.
PLEASE SEE "HELP PROPRIETARY" FOR DETAILS.

d ti...

[illegible]

[illegible] 17:39:07 [illegible] 2001

L1 [illegible]
L2 9675 S VIRUS? OR VECTOR?
L3 [illegible]
L4 [illegible]

[illegible] 17:39:23 [illegible] 2001

L5 9114

dup rem l5

PROCESSING COMPLETED FOR L5
L6 6 DUP REM L5 (3109 DUPLICATES REMOVED)

d l1- bib ab

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUM

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 2000:814317 CAPLUS
DN 133:361907
TI Compositions and methods for identifying antigens which elicit an immune
response
IN Chen, Shiyi, Chaoyang
PA Wake Forest University, USA
SO PCT Int. Appl., 164 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
---------- ---- -------- ---------- --------
PI WO 2000069461 A1 20001116 WO 2000-US12177 20000505
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,

DESIGNATED CA
PRAI US 1999-132750P 19990506
US 1999-132752P 19990506
AB This invention relates to an expression vector wherein said expression
vector comprises: a polynucleotide encoding a cell binding element and a
polynucleotide encoding a signal sequence operatively linked to said first
polynucleotide encoding a cell binding element and a polynucleotide
encoding a signal sequence operatively linked to said first polynucleotide
protein or peptide, a polynucleotide encoding a cell binding element and a
polynucleotide polyadenylation sequence all operatively linked More
particularly, it relates to the method of eliciting an immune response
directed against an antigen in a mammal comprising the steps of
introducing the expression vector into a cell capable of causing the vector to
produce an antigen under conditions wherein the antigen is secreted from
the cell, endocytosing the secreted antigen into the cell, processing the
antigen, and presenting fragments to a receptor to elicit a T-cell
response. In addn., this invention relates to a ***vaccine*** and a
method of use. The invention also relates to the method of identifying
MHC II restricted epitopes
RE.CNT 9
RE
(1) Berger, US 5587455 A 1996 CAPLUS
(2) Carson, US 5679647 A 1997 CAPLUS
(3) Commonwealth Scientific And Industrial Research Organisation; WO 9700321 A1
1997 CAPLUS
(4) Dranoff, US 5637483 A 1997 CAPLUS
(5) Johnston, US 5703057 A 1997 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 2000:553678 CAPLUS
DN 133:160529
TI Generation of genetic ***vaccines*** and immunomodulatory
polynucleotides by non-stochastic directed evolution techniques
IN Short, Jay M.
PA Diversa Corporation, USA
SO PCT Int. Appl., 718 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 11
PATENT NO. KIND DATE APPLICATION NO.
DATE
---------- ---- -------- ---------- --------
PI WO 2000046344 A2 20000810 WO 2000-US3086
20000204
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH,
CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI,
SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT,
BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 6171820 B1 20010109 US 1999-246178
19990204
PRAI US 1999-246178 19990204
US 1995-8311 19951207
US 1995-8316 19951207
US 1996-651568 19960522
US 1996-677112 19960709
US 1996-700489 19961205
US 1997-962504 19971031
US 1998-185373 19981103
AB This invention provides methods of obtaining novel
polynucleotides and
encoded polypeptides by use of non-stochastic methods of directed
evolution (DirectEvolution RTM.). These methods include
non-stochastic
polynucleotide site-satn. mutagenesis (GeneSite Satn.
Mutagenesis RTM.)
and non-stochastic polynucleotide reassembly
(GeneReassembly RTM.).
Through use of the claimed methods, genetic ***vaccines***,
enzymes,
and other desirable mols. can be evolved towards desirable
properties.
For example, ***vaccine*** vectors can be obtained that exhibit
increased efficacy for use as genetic ***vaccines***. Vectors
obtained by using the methods can have, for example, enhanced
antigen
expression, increased uptake into a cell, increased stability in a cell,
ability to tailor an immune response, and the like. This invention
provides methods of obtaining novel enzymes that have optimized
phys
and/or biol. properties. Furthermore, this invention provides
methods of
obtaining a variety of novel biol. active mols. in the fields of
antibiotics, pharmacotherapeutics, and transgenic traits

L6 ANSWER 4 OF 6 MEDLINE DUPLICATE 1
AN 2000429953 MEDLINE
DN 20148983
TI Recombinant ***adeno*** - ***associated*** virus
expressing human
papillomavirus type 16 E7 peptide DNA fused with heat
shock
protein DNA as a potential ***vaccine*** for cervical cancer.
AU Hu ZW; Hsu CP; Kung JT; Ding DC; Chen SH
CS Department of Microbiology and Immunology, Taipei, Taiwan, Republic of
China.
SO Journal of medical virology, (2000 Jul) 61 (3) 328-34.
Journal code: 7705876. ISSN: 0022-2658.
CY United States
DT Journal Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 200008
EW 20000602
AB In this study, we explore a potential ***vaccine*** for human
papillomavirus (HPV)-induced tumor by using heat shock
protein as
an adjuvant, a peptide ***vaccine*** and
adeno -
associated virus (AAV) as a gene delivery vector. The
tumor
vaccine was devised by constructing a chimeric gene
which
contained HPV type 16 E7 cytotoxic T-lymphocyte (CTL) epitope
DNA (M.C.
Feltkamp, H.L. Smits, M.P. Vierboom, R.P. Minnaar, B.M. de
Jongh, J.
W. Drijfhout, J. ter Schegget, C.J. Melief, and W.M. Kast, Eur. J.
immunol. 23:2242-2249, 1993) fused with the heat shock protein
gene as a
tumor ***vaccine*** delivered via AAV. Our results
demonstrate that
this ***vaccine*** can eliminate tumor cells in syngeneic
animals and
induce CD4- and CD8-dependent CTL activity in vitro. Moreover,
studies
with knockout mice with distinct T-cell deficiencies confirm that
CTL-induced tumor protection is CD4 and CD8 dependent. Taken
together, the
evidence indicates that this chimeric gene delivered by AAV has
potential
as a cervical cancer ***vaccine***

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 1999:529250 CAPLUS
DN 131:140500
TI Genetic ***vaccine*** vectors engineering by DNA shuffling
IN Patten, Phillip A.; Stemmer, Willem P. C.; Whalen, Robert Gerald;
Howard,
Russell
PA Maxygen, Inc., USA
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4
PATENT NO. KIND DATE APPLICATION NO.

DATE:

PI WO 9943809 A2 19990910 WO 1999-US3022
19990210
WO 9943809 A3 19990923
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
CU CZ DE
DK EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MD
MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI
SK SL TJ TM
TR TT UA UG US UZ VN YU ZW AT BE CH CY
DE DK ES
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF
CG CI
CM GA GN GW ML MR NE SN TD TG
AU 9932910 A1 19990830 AU 1999-32910 19990210
EP 1056842 A2 20001206 EP 1999-932508 19990210
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
MC PT
IE FI
PRAI US 1998-21769 19980211
US 1998-74294 19980211
WO 1999-US3022 19990210
AB This invention provides methods of obtaining ***vaccines***
by use of
DNA shuffling. Through use of the claimed methods, vectors can
be
obtained which exhibit increased efficacy for use as genetic
vaccines. Two or more genetic components are provided
that confer
upon the ***vaccine*** the ability to direct an immune
response to or
to achieve an optimal response to vaccination. For example, the
genetic
vaccines can include a component that provides optimal
antigen
release, a component that provides optimal production of cytotoxic T
lymphocytes, a component that directs release of an
immunomodulator, a
component that directs release of a chemokine, and/or a component
that
facilitates binding to, or entry into, a desired target cell type. For
example, a component can confer improved binding to, and uptake
of, the
genetic ***vaccine*** to target cells such as antigen-specific
cells
or antigen-presenting cells. Addnl. components include those that
direct
antigen peptides derived from uptake of an antigen into a cell to
presentation on either Class I or Class II molds. For example, one
can
include a component that directs antigen peptides to presentation
on Class
I molds and comprises a polynucleotide that encodes a protein such
as
Lipasin, LAP-1 and LAP-2, and/or a component that directs antigen
peptides to presentation on Class II molds and comprises a
polynucleotide
that encodes a protein such as an endosomal/lysosomal protease

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2001 ACS
[illegible]
DN [illegible]
[illegible] immune [illegible] associated
with
papilloma viruses and their sequences
IN Kleinschmidt, Juergen; Jochmus, Ingrid; Gissmann, Lutz;
Muller, Mario
PA Deutsches Krebsforschungszentrum Stiftung des Offentlichen
Rechts,
Germany
SO Ger. Offen., 44 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO.
DATE
PI DE 19631357 A1 19980205 DE 1996-19631357
19960802
WO 9805780 A1 19980212 WO 1997-DE1629
19970730
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE
EP 917520 A1 19990526 EP 1997-935800 19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
PRAI DE 1996-19631357 19960802
WO 1997-DE1629 19970730
AB A ***vaccine*** against cells infected with human
papillomavirus (HPV) comprises a vector containing a
nucleic acid
which encodes a fusion polypeptide where the fusion polypeptide
consists
of a structural ***papillomavirus*** (poly)peptide and a
transforming (poly)peptide encoded by an early
papillomavirus
gene. Thus, the open reading frame (ORF) encoding C-terminally
truncated
major capsid protein L1 of HPV 16 was amplified by PCR, inserted
into
vector pUC19, and ligated to an ORF fragment encoding the first six
amino
acids of protein E6 of HPV 16; the deletion from E6 destroys the
transforming properties of the transcript. The L1-E6 fusion gene
was
[illegible] into adeno-associated virus vector pTE2

L7

ANSWER 6 OF 6 CAPLUS COPYRIGHT 2001 ACS
[illegible]
DN [illegible]
[illegible] immune [illegible] associated
with
papilloma viruses and their sequences
IN Kleinschmidt, Juergen; Jochmus, Ingrid; Gissmann, Lutz;
Muller, Mario
PA Deutsches Krebsforschungszentrum Stiftung des Offentlichen
Rechts,
Germany
SO Ger. Offen., 44 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO.
DATE
PI DE 19631357 A1 19980205 DE 1996-19631357
19960802
WO 9805780 A1 19980212 WO 1997-DE1629
19970730
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE
EP 917520 A1 19990526 EP 1997-935800 19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
PRAI DE 1996-19631357 19960802
WO 1997-DE1629 19970730
AB A ***vaccine*** against cells infected with human
papillomavirus (HPV) comprises a vector containing a
nucleic acid
which encodes a fusion polypeptide where the fusion polypeptide
consists
of a structural ***papillomavirus*** (poly)peptide and a
transforming (poly)peptide encoded by an early
papillomavirus
gene. Thus, the open reading frame (ORF) encoding C-terminally
truncated
major capsid protein L1 of HPV 16 was amplified by PCR, inserted
into
vector pUC19, and ligated to an ORF fragment encoding the first six
amino
acids of protein E6 of HPV 16; the deletion from E6 destroys the
transforming properties of the transcript. The L1-E6 fusion gene
was
[illegible] into adeno-associated virus vector pTE2

s 17

ANSWER 6 OF 6 CAPLUS COPYRIGHT 2001 ACS
L7 3144 L3

dup rem l7

PROCESSING COMPLETED FOR L7
L9 [illegible] DUPLICATES REMOVED)

e kleinshmidt jurgen au

E1 4 KLEINSCHMIDT JULIA J AU
E2 1 KLEINSCHMIDT JULIUS AU
E3 0 --> KLEINSHMIDT JURGEN AU
E4 0 KLEINSMALLENBERG HEINZ WILHELM AU
E5 2 KLEINSMIDT P J AU
E6 1 KLEINSMIDT P AU
E7 1 KLEINSMIDT J AU
E8 1 KLEINSMITH A M AU
E9 2 KLEINSMITH D AU
E10 2 KLEINSMITH D A AU
E11 1 KLEINSMITH D A M AU
E12 1 KLEINSMITH D A'ZIE AU

e kleinschmidt jurgen au

E1 2 KLEINSCHMIDT JULIA J AU
E2 3 KLEINSCHMIDT JULIUS AU
E3 17 --> KLEINSCHMIDT JURGEN AU
E4 15 KLEINSCHMIDT [illegible] AU
E5 [illegible] KLEINSCHMIDT K AU
E6 2 KLEINSCHMIDT [illegible] AU
E7 1 KLEINSCHMIDT [illegible] AU

E8 2 [illegible]
E9 5 KLEIN[illegible]
E10 48 KLEINSCHMIDT JURGEN A
E11 1 KLEINSCHMIDT JUERGEN A
E12 1 KLEINSCHMIDT JUERGEN A

s e2-e4

L10 50 (KLEINSCHMIDT JURGEN A)/AU
"KLEINSCHMIDT JUERGEN A"/AU

s l10 and papilloma? ab,bi

'AB' IS NOT A VALID FIELD CODE
L11 11 L10 AND (PAPILLOMA? AB,BI

d

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS
AN 2000:359342 CAPLUS
DN 133:99254
TI Preclinical studies on gene therapy of cervical carcinoma using adeno-associated virus vectors
AU Kunke, David; Grimm, Dirk; Denger, Stefanie; Kreuzer, Jorg; Deitus, Hajo; [illegible]; Dymitr [illegible]; ***Kleinschmidt, Jurgen A***
CS Deutsches Krebsforschungszentrum, Forschungsschwerpunkt Angewandte Tumorvirologie, Heidelberg, D-69120, Germany
SO Cancer Gene Ther. (2000), 7(5), 766-777
CODEN: CGTHE3, ISSN: 0929-1903
PB Nature America Inc.
DT Journal
LA English
RE.CNT 62
RE
(2) Alvarez-Salas, L; Proc Natl Acad Sci U S A 1999, V95, P1389 CAPLUS
(3) Bottazzi, B; J Immunol 1992, V148, P1280 CAPLUS
(4) Chatterjee, S; Methods 1993, V5, P51 CAPLUS
(5) Chomczynski, P; Anal Biochem 1987, V162, P156 CAPLUS
(6) Conrad, C; Gene Ther 1996, V3, P658 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

e jochmus ingrid au

E1 6 JOCHMUS H AU
E2 54 JOCHMUS I AU
E3 24 --> JOCHMUS INGRID AU
E4 1 JOCHMUS INGRID ADELHEID AU
E5 1 JOCHMUS S AU
E6 17 JOCHMUS SUSANNE KAI AU
E7 5 JOCHMUS-KOSSMEHL CHRISTIN AU
E8 5 JOCHNER H AU
E9 1 JOCHNER HANS AU
E10 4 JOCHNER N AU
E11 4 JOCHNER-KNOBLOCH AU
E12 4 JOCHNER-KNOBLOCH SABINE AU

s e2-e4

L12 79 ("JOCHMUS I"/AU OR "JOCHMUS INGRID"/AU OR JOCHMUS(2)I?(3)BIOL DR"/AU

s l12 and papilloma? ab,bi

'AB' IS NOT A VALID FIELD CODE
L13 53 L12 AND (PAPILLOMA? AB,BI)

s l13 and vaccine# ab,bi

'AB' IS NOT A VALID FIELD CODE
L14 11 L13 AND VACCINE# AB,BI

dup rem l14

PROCESSING COMPLETED FOR L14
L15 7 DUPREM L14 (4 DUPLICATES REMOVED)

s l13 and vector# ab,bi

'AB' IS NOT A VALID FIELD CODE
L16 6 L13 AND VECTOR# AB,BI

dup rem l16

PROCESSING COMPLETED FOR L16
L17 6 DUPREM L16 (0 DUPLICATES REMOVED)

d l17 1- bib ab

YOU HAVE REQUESTED DATA FROM 6 ANSWERS - CONTINUE? Y/(N):Y

L17 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 2000:865093 CAPLUS
DN 134:16537
TI Cytotoxic T-cell epitopes of the ***Papillomavirus*** L1-Protein and their use in diagnostics and therapy
IN Schaefer, Klaus; Faath, Stefan; ***Jochmus, Ingrid***; Nieland, John; Osen, Wolfram
PA Medigene A.-G., Germany; Deutsches Krebsforschungszentrum (DKFZ)
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI DE 19925235 A1 20001207 DE 1999-19925235 19990601
WO 2000073464 A1 20001207 WO 2000-EP5006 20000531
W: AU, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI DE 1999-19925235 19990601
AB The available invention concerns ***Papillomavirus*** T-cell epitopes with an amino acid sequence [illegible] and/or a functionally active variant thereof, as well as their use in diagnostics and therapy.
RE.CNT 3
RE
(1) Anon; EP 0375555 A1 CAPLUS
(2) Anon; EP 0451580 A2 CAPLUS
(3) Anon; WO 9302184 CAPLUS

L17 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 2000:865090 CAPLUS
DN 134:16536
TI Cytotoxic T-cell epitopes of the ***Papillomavirus*** L1 proteins and their use in diagnossis and therapy
IN Nieland, John; ***Jochmus, Ingrid***
PA Medigene A.-G., Germany
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI DE 19925199 A1 20001207 DE 1999-19925199 19990601
WO 2000073553 A1 20001207 WO 2000-EP5006 20000531
W: AU, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI DE 1999-19925199 19990601
AB The available invention concerns ***Papillomavirus*** T-cell epitopes with the amino acid sequence [illegible] and/or a functionally active variant thereof, as

well as their use in diagnosis and therapy

RECNT 3

RE

(1) Amon, EP 0137855 A1 CAPLUS

(2) Amon, EP 0151554 A2 CAPLUS

(3) Amon, WO 9826784 CAPLUS

L17 AN [illegible] DERWENT 2001 EPO

LEVEL 1

AN [illegible] DW 199921 DW 199921

TI ***VECTOR FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS ASSOCIATED TO ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

IN [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN, JUTTA; MUELLER, MARTIN

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN, JUTTA; MUELLER, MARTIN

PA [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

STIFTUNG DES OEFFENTLICHEN RECHTS

PAS [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

PAA [illegible]

TL English, French, German

LA German

DT Patent

PIT EPAI PUBL OF APPLICATION WITH SEARCH REPORT

PI EP 917586 A1 19990526

[illegible]

AI EP 1997-935800 A 19970730

PRAI WO 1997-DE1629 W 19970730

DE 1996-19631357 A 19960802

L17 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2001 ACS

AN 1999:708918 CAPLUS

DN 131:335792

TI Human ***papillomavirus*** E6 and E7 protein derived polypeptides with immunogenic properties and modified biological activities for cancer diagnosis and therapy

IN Grussmann, Jutta; ***Iochmann, Ingrid***

PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9955876	A2	19991104	WO 1999-DE1331	19990430
WO 9955876	A3	20000323		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 19819476 C1 20000105 DE 1998-19819476 19980430

AU 9948084 A1 19991116 AU 1999-48084 19990430

PRAI DE 1998-19819476 19980430

WO 1999-DE1331 19990430

AB The invention concerns toxic or transforming polypeptides or with immunogenic properties that are 10-40 amino acid fragments with altered biol. activities of human ***papillomavirus*** (HPV16 or HPV18) E6 or E7 proteins. The invention also relates to the DNA coding for a polypeptide of this type, to a method for producing a polypeptide of this type, the usage of the DNA and polypeptide for active immunization, and to antibodies against the polypeptide

L17 ANSWER 5 OF 6 INPADOC COPYRIGHT 2001 EPO

LEVEL 1

AN 461058879 INPADOC EW 199809 UW 199843

TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS ASSOCIATED TO ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

IN [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN JUTTA; MUELLER MARTIN

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN JUTTA; MUELLER MARTIN

PA [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

STIFTUNG DES OEFFENTLICHEN RECHTS

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

MUELLER, MARTIN

PAS [illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

MARTIN

PAA DE, DE, DE, DE, US

PA DEUTSCHES KREBSFORSCHUNGSZENTRUM

STIFTUNG DES OEFFENTLICHEN RECHTS

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

MUELLER, MARTIN

PAS DEUTSCHES KREBSFORSCHUNGSZENTRUM

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

GRUSSMANN

[illegible] ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF

MARTIN

PAA DE, DE, DE, DE, US

TL English, French, German

LA German

DT Patent

PIT WOAI PUBL OF THE INT APPL WITH INT SEARCH REPORT

PI WO 9805790 A1 19980212

DS RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

PI US

W: JP, US

AI WO 1997-DE1629 A 19970730

PRAI DE 1996-19631357 A 19960802

L17 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2001 ACS

AN 1998:102997 CAPLUS

DN 128:153148

TI Vaccine against cells infected with human ***papillomavirus*** (HPV)

IN Grussmann, Jutta; ***Iochmann, Ingrid***; Grussmann, Jutta; Mueller, Martin

PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany

SO Ger. Offen., 4 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19631357	A1	19980205	DE 1996-19631357	19960802
WO 9805790	A1	19980212	WO 1997-DE1629	19970730

W: JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 917586 A1 19990526 EP 1997-935800 19970730

R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

PRAI DE 1996-19631357 19960802

WO 1997-DE1629 19970730

AB A vaccine against cells infected with human ***papillomavirus*** (HPV) comprises a ***vector*** contg. a nucleic acid which encodes a fusion polypeptide, where the fusion polypeptide consists of a structural ***papillomavirus*** (poly)peptide and a nontransforming (poly)peptide encoded by an early ***papillomavirus*** gene. Thus, the open reading frame (ORF) encoding C-terminally truncated major capsid protein L1 of HPV was amplified by PCR, inserted into ***vector*** pUC19, and ligated to an EcoRI fragment encoding the 1st 50 amino acids of protein E6 of HPV. In the deletion from E6 destroys the transforming properties of the transcript. The L1-E6 fusion gene was excised and inserted into adeno assoed. virus ***vector*** pUE2

d HS L bib ab

L5 ANSWER 2 OF 7 MEDLINE
AN 2000361414 CAPLUS
DN 134:136535
TI Test system for in vitro detection of an antigen-specific immune response
IN ***Jochmus, Ingrid*** ; Nieland, John
PA Medigene Aktiengesellschaft, Germany
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
---------- ---- -------- ---------- --------
PI WO 2000037900 A1 20000629 WO 2000-EP5003 20000531
W: AU, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
DE 19925234 A1 20001214 DE 1999-19925234 19990601
PRAI DE 1999-19925234 19990601
AB The invention relates to a test system comprising at least one capsomer, at least one stable capsomer, at least one capsid, at least one VLP and/or at least one CVLP and at least one target cell presenting an antigen, esp. a B cell, a macrophage, a predendritic cell, a dendritic cell, embryonal cell and/or fibroblast, which has been incubated with at least one capsomer, at least one stable capsomer, at least one capsid, at least one VLP and/or at least one CVLP, in order to detect an antigen-specific immune response in vitro. Cytotoxic cellular immune responses from effector cells of the immune system (esp. T cells, NK cells, preferably T cells, more preferably cytotoxic T cells or helper T cells). The invention also relates to the use thereof in diagnosis and therapy.
RE.CNT 7
RE
(1) Gissmann, L; WO 9918220 A 1999 CAPLUS
(2) Greenstone, H; Proc Natl Acad Sci U S A 1998, V95(4), P1800 CAPLUS
(3) Kaufmann, A; INT J CANCER 1997, V73(6), P781 CAPLUS
(4) Muller, M; VIROLOGY 1997, V234(1), P93 CAPLUS
(5) Peng, S; VIROLOGY 1998, V244(2), P147 CAPLUS
(7) Us Health; WO 9405792 A 1994 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 7 MEDLINE COPYRIGHT 2004 ELSEVIER SCI. B.V. DUPLICATE 1
AN 99372678 PUBMED
TI Immunization against human ***papillomavirus*** infection and associated neoplasia.
AU Osen W; ***Jochmus I***; Muller M; Gissmann L
CS L. Gissmann, German Cancer Research Center, Im Neuenheimer Feld 280, D-69120 Heidelberg, Germany. l.gissmann@dkfz-de
SO Journal of clinical virology : ... (1999 Jul) 13 (1-2) 7-16.
ISSN: 1386-6532 CODEN: JCVIFB
PUB.S 1386-6532(00)000090-1
CY Netherlands
DT Journal Article
FS 004 Microbiology
010 Cancer
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB Background: Chimeric virus like particles (CVLPs) constructed by fusing human ***papillomavirus*** type 16 (HPV16) L7 sequences into the C-terminus of the viral L1 gene constitute the first generation of preventive and therapeutic HPV ***vaccines***. Even though vaccination with DNA is highly efficient in the induction of a cytotoxic T-cell (CTL) response utilization of a DNA ***vaccine*** in the HPV context, it has been hampered by concern for the oncogenic potential of the E6 and E7 proteins encoded by the viral oncogenes. Objective: To consider the use and impact of E7 DNA for immunization. Experimental: In addition to hemagglutination inhibition, a versatile assay to measure neutralization of yeast cell-derived pseudovirions carrying a green fluorescence reporter gene has now been developed. Mice immunized with the HPV16 CVLPs generate E7-specific CTLs, which kill E7 expressing or E7 peptide loaded RMA-cells, protect against tumor formation by syngeneic HPV transformed cells and also induce regression of already established tumors. Since generation of CTL response is achieved by presentation of epitopes as short peptides together with appropriate MHC class I molecules, complete proteins are not required. Instead, a shuffled E7 protein has now been used successfully for generating CTL responses comparable to the E7 specific ones in mice. Conclusions: Our preliminary results suggest that immunization with E7 shuffled DNA vaccines the potency to protect against the authentic E7 protein. Furthermore, booster immunization with E7 shuffled DNA would avoid inhibition by neutralizing antibodies. (c) 2000 Elsevier Science B.V.

L5 ANSWER 2 OF 7 MEDLINE DUPLICATE 2
AN 20040922 PUBMED
DN 20040922
TI Chimeric virus-like particles of the human ***papillomavirus*** type 16 (HPV16) L1 as a prophylactic and therapeutic ***vaccine***.
AU ***Jochmus I***; Schafer K; Faath S; Muller M; Gissmann L
CS MediGene AG, Martinsried, Germany.
SO ARCHIVES OF VIROLOGY. SUPPLEMENTA (1999 Jul-Aug) 30 (4) 269-74. Ref: 31
Journal code: BIC. ISSN: 0168-0128.
CY Austria
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW; TUTORIAL)
LA English
EM 200005
EW 20000502
AB Infection by certain human ***papillomaviruses*** (HPV), most notably HPV types 16 and 18, is the major risk factor for cervical cancer. Worldwide, this disease represents the second most frequent malignant tumor in women, thus, there is urgent need for efficient therapy and prevention. The natural history of cervical cancer and its precursors (cervical intraepithelial neoplasias) as well as animal experiments strongly suggest that the immune system controls both the primary infection (by neutralizing antibodies directed against the major structural protein L1) and the progression of the disease (via cytotoxic T cells specific for the viral oncoproteins expressed in transformed cells. E.g. E7). By the expression of an HPV 16 L1/E7 fusion protein, we have generated chimeric virus-like particles (CVLPs). Immunization of mice with CVLPs induces neutralizing antibodies directed against L1 virus-like particles (devoid of the E7 portion) and E7 specific T cells as measured in vitro. Vaccinated animals are protected against tumor growth following

inoculation of syngeneic HPV 16-transformed cells. In addition, we observed a therapeutic effect of vaccination on pre-existing tumors. This data allowed us to conclude that CVLPs are suitable for prevention and therapy of HPV infection. A ***vaccine*** based on HPV 16 L1/E7 CVLPs is currently under development.

L15 ANSWER 4 OF 7 APLUS COPYRIGHT 2003 ACS
AN 1998:102967 CAPLUS
DN 128:126460
TI Methods for activating the immune system against cells associated with ***papilloma*** viruses and their sequences
IN Kleinschmidt, Jurgen ***Ischmus, Ingrid*** Gissmann, Lutz; Mueller, Martin
PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19631357	A1	19980205	DE 1996-19631357	19960802
WO 9805790	A1	19980212	WO 1997-DE1629	19970730
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 917586	A1	19990526	EP 1997-935800	19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
PRAI DE 1996-19631357				19960802
WO 1997-DE1629				19970730

AB A ***vaccine*** against cells infected with human ***papillomavirus*** (HPV) comprises a vector containing a nucleic acid which encodes a fusion polypeptide, where the fusion polypeptide consists of a structural ***papillomavirus*** (poly)peptide and a nontransforming (poly)peptide encoded by an early ***papillomavirus*** gene. Thus, the open reading frame (ORF) encoding C-terminally truncated major capsid protein L1 of HPV 16 was amplified by PCR, inserted into vector pUC19, and ligated to an ORF fragment encoding the 1st 50 amino acids of protein E6 of HPV 16; the deletion from E6 destroys the transforming properties of the transcript. The L1-E6 fusion gene was excised and inserted into adeno-assoc. virus vector pUE2.

L15 ANSWER 5 OF 7 MEDLINE DUPLICATE 3
SCI EAV
AN 1998161666 EMBASE
TI [Epidemiology, etiology and prevention of cervical carcinoma]
AU Schneider A.; Durst M.; ***Jochmus I.*** ; Gissmann L.
CS Prof. A. Schneider, Abteilung Frauenheilkunde, Friedrich Schiller-Universitat, Bachstrasse 18, D-07740 Jena, Germany
SO Onkologe, (1998) 4 (2) 110-125
Refs: 152
ISSN: 0947-8965 CODEN: ONKOE4
CY Germany
DT Journal; General Review
FS 004 Microbiology
005 General Pathology and Pathological Anatomy
016 Cancer
017 Public Health, Social Medicine and Epidemiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA German
SL German

L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1997:739003 CAPLUS
DN 128:12421
TI Immunological aspects of the E6 and E7 oncogenes: tools for diagnosis and therapeutic intervention
AU ***Jochmus, Ingrid*** ; Gissmann, Lutz
CS USA
SO Papillomaviruses Hum. Cancer (1997), 137-165. Editor(s): Tommasino, Massimo. Publisher: Landes, Austin, Tex.
CODEN: 65HEAP
DT Conference; General Review
LA English
AB A review and discussion with 84 refs. Antibodies to early HPV (human ***papillomavirus***) proteins such as E6 and E7 which are constitutively expressed in HPV infected epithelial cells do not influence the outcome of infection. However, they seem to be a marker of HPV-related malignant tumors that develop as a late consequence of virus persistence. Understanding mechanisms that enable the virus to escape immune surveillance by the host are of particular importance for the development of a therapeutic ***vaccine*** . Results from animal expts. and preliminary data obtained from clin. trials with cervical cancer patients indicate that therapy using the HPV E6 or E7 antigens as therapeutic ***vaccines*** could be a successful means for the treatment of patients with cancer or pre-cancerous HPV-associated lesions.

L15 ANSWER 7 OF 7 MEDLINE DUPLICATE 5
AN 93378357 MEDLINE
DN 93378357
TI Immune response to genital ***papillomavirus*** infections in women. Prospects for the development of a ***vaccine*** against cervical cancer.
AU Gissmann L.; ***Jochmus I*** .; Cid-Arregui A.; Muller M.
CS Forschungsschwerpunkt Angewandte Tumorvirologie, Deutsches Krebsforschungszentrum, Heidelberg, Germany.
SO Journal of Cellular Biochemistry. Supplement, (1993) 17F, 216-24. Journal code: 8205768. ISSN: 0733-1959.
Publication Year: 1993 Aug 12) 690 80-5. Ref: 27
Journal code: 8205768. ISSN: 0733-1959.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; Cancer Journals
EM 199312

e gissmann lutz au

E1	1	GISSMANN AU
E2	431	GISSMANN L AU
E3	177	GISSMANN LUTZ AU
E4	8	GISSMANN L U T Z AU
E5	2	GISSMANN LUTZ PROF DIPL BIOL D AU
E6	13	GISSMANN LUTZ PROF DR AU
E7	1	GISSMILLER K AU
E8	1	GISSON B S AU
E9	1	GISSONI R H AU
E10	1	GISSOT A AU
E11	9	GISSOT ARNAUD AU
E12	1	GISSOT L AU

s e2-e6

L18 626 ("GISSMANN L" AU) OR "GISSMANN LUTZ" AU OR "GISSMANN L U T Z" OR "GISSMANN LUTZ PROF DIPL BIOL D" AU OR "GISSMANN LUTZ PROF DR" AU)

s l18 and papilloma? ab,bi

'AP' IS NOT A VALID FIELD CODE
L19 547 L18 AND PAPILLOMA? AB,BI

s l19 and vector# ab,bi

'AB' IS NOT A VALID FIELD CODE
L20 24 L19 AND VECTOR#/AB,BI

=> s l20 and pur?/ab,bi
'AB' IS NOT A VALID FIELD CODE
L21 1 L20 AND PUR?/AB,BI

=> d

L21 ANSWER 1 OF 1 ...
AN 1998:102997 CAPLUS
DN 128:1...
TI Method for activating the immune system against cells associated with
papilloma viruses or their sequences
IN ... Ingrid; ... ***Lutz***; Mueller, Martin
PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
--------------- ---- -------- --------------- --------
PI DE 19631357 A1 19980205 DE 1996-19631357 19960802
WO 9805790 A1 19980212 WO 1997-DE1629 19970730
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 917586 A1 19990526 EP 1997-935500 19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
PRAI DE 1996-19631357 19960802
WO 1997-DE1629 19970730

=> s l20 and adeno?/ab,bi
'AB' IS NOT A VALID FIELD CODE
L22 1 L20 AND ADENO?/AB,BI

=> dup rem l20
PROCESSING COMPLETED FOR L20
L23 12 DUP REM L20 (12 DUPLICATES REMOVED)

=> d 1- bib ab

YOU HAVE REQUESTED DATA FROM 12 ANSWERS -
CONTINUE? Y/(N):y

L23 ANSWER 1 OF 12 INPADOC COPYRIGHT 2001 EPO

LEVEL 1
AN ...
TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS
ASSOCIATED TO ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF
IN ...
*** LUTZ***; MUELLER, MARTIN
INA DE; DE; DE; US
PA ... STIFTUNG DES OEFFENTLICHEN RECHTS
PAS DEUTSCHES KREBSFORSCH
PAA DE
TL English; French; German
LA German
DT Patent
PIT EPA1 PUBL. OF APPLICATION WITH SEARCH REPORT
PI EP 917586 A1 19990526
DS R AT BE CH DE DK ES FR GB IT LI NL SE
AI EP 1997-935500 A 19970730
PRAI WO 1997-DE1629 W 19970730
DE 1996-19631357 A 19960802

L23 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2001 ACS
AN 1999:708918 CAPLUS
DN 131:335792
TI Human ***papillomavirus*** E6 and E7 protein derived polypeptides with
immunogenic properties and modified biological activities for cancer
diagnosis and therapy
IN ***Gissmann, Lutz***; Jochmus, Ingrid
PA Deutsches Krebsforschungszentrum Stiftung des Offentlichen Rechts, Germany
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
--------------- ---- -------- --------------- --------
PI WO 9955876 A2 19991104 WO 1999-DE1331 19990430
WO 9955876 A3 20000323
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK,
EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
DE 19819476 C1 20000105 DE 1998-19819476 19980430
AU 9948954 A1 19991116 AU 1999-48954 19990430
PRAI DE 1998-19819476 19980430
WO 1999-DE1331 19990430
AB The invention concerns ***non*** transforming polypeptide(s) with
immunogenic properties that are 10-40 amino acid fragments with altered
biol. activities of human ***papillomavirus*** (HPV16 or HPV18) E6 or
E7 proteins. The invention also relates to the DNA that codes a
polypeptide of this type, to a method for producing a polypeptide of this
type, the usage of the DNA and polypeptide for active immunization, and to
antibodies against the polypeptide

L23 ANSWER 3 OF 12 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1999:226319 BIOSIS
DN PREV199900226319
TI Kinetic selection of HPV 16 E6/E7-directed antisense nucleic acids
Anti-proliferative effects on HPV 16-transformed cells
AU Venturini, Francesca; Braspenning, Joris; Homann, Matthias; ***Gissmann,***
*** Lutz***; Sczakiel, Georg (1)
CS (1) Forschungsschwerpunkt Angewandte Tumorvirologie, Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 242, D-69120, Heidelberg
Germany
SO Nucleic Acids Research, (April 1, 1999) Vol. 27, No. 7, pp. 1585-1592.
ISSN: 0305-1048
DT Article
LA English
SL English
AB The E6/E7 coding sequences of the human ***papillomavirus*** type 16
(HPV 16) were probed for kinetic accessibility in vitro by pools of
catalytic antisense RNA. Only long-chain complementary RNA and very few
antisense sequences with a ... portion complementary to a 10 nt window
within unspliced and spliced E6-coding target sequences showed fast
annealing with ka... values of up to 1/M/s indicating that the

majority of Eto E7 RNA sequences are unfavourable targets for antisense
inhibition and that secondary RNA annealing may be a
Oligodeoxynucleotides directed against the translation of E6/E7 inhibited
cell proliferation of HPV 16-transformed SiHa cells but not slow-annealing
antisense species. Antisense RNA of 27 and 63 nucleotides in length
also showed significant anti proliferative activity. Biological effects of
antisense oligodeoxyribonucleotides were specific for the anti-sense
sequences, could only be found in HPV positive but not in HPV-negative cell
lines, and were related to decreased levels of E7 protein and
E6/E7-specific transcripts. This work suggests that HPV 16 E7 E6 sequences
exhibit a low accessibility for antisense oligonucleotides. This can be
overcome, however, by exploiting the relationship between fast annealing
of antisense species and their increased efficacy in human cells

L23 AN 1996:462867 CAPLUS (Copyright (C) 2006 ACS)

LEVEL 1
AN 1996:462867 CAPLUS
DN 125:155130
TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM
AGAINST CELLS
ASSOCIATED WITH ***PAPILLOMA*** VIRUS AND
SEQUENCES THEREOF
IN ELLERBROCK, GERD; JOCHIMUS, JOSEF;
GISSMANN, LUTZ; MUELLER, MARTIN
PA ***GISSMANN, LUTZ*** ; MUELLER
MARTIN
INA DE, DE, DE, US
PA DEUTSCHES KREBSFORSCHUNGZENTRUM
STIFTUNG DES OEFFENTLICHEN RECHTS;
JUERGENS, JOCHIMUS; ELLERBROCK
MUELLER, MARTIN
PAS DEUTSCHES KREBSFORSCHUNGZENTRUM
JUERGENS, JOCHIMUS; ELLERBROCK
LUTZ, MUELLER MARTIN
PAA DE, DE, DE, DE, US
TI English, French, German
LA German
DT Patent
PIT WIPO PCT APPLICATION WITH INTERNATIONAL
REPORT
PI WO 9805790 A1 19980212
DS RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
W: JP, US
AI WO 1997-DE1629 A 19970730
PRAI DE 1996-19631357 A 19960802

L23 AN 1996:462867 CAPLUS (Copyright (C) 2006 ACS)
AN 1996:462867 CAPLUS
DN 125:155130
TI Method for activating the immune system against cells associated with
papilloma viruses or their sequences
IN Ellerbrock, Gerd; Juergens, Jochimus; Ingrid ***Gissmann, Lutz*** ; Mueller, Martin
PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO.
DATE
---------- ---- -------- ---------- --------
PI DE 19631357 A1 19980205 DE 1996-19631357
19960802
WO 9805790 A1 19980212 WO 1997-DE1629
19970730
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 917586 A1 19990526 EP 1997-935001 19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
PRAI DE 1996-19631357 19960802
WO 1997-DE1629 19970730
AB Vaccine against cells infected with human
papillomavirus (HPV)
comprises a ***vector*** contg. a nucleic acid which encodes a fusion
polypeptide, where the fusion polypeptide consists of a structural
papillomavirus (poly)peptide and a nontransforming (poly)peptide
encoded by an early ***papillomavirus*** gene. Thus, the open reading
frame (ORF) encoding C-terminally truncated major capsid protein L1 of HPV
16 was amplified by PCR, inserted into ***vector*** pUC19, and ligated
to an ORF fragment encoding the 1st 50 amino acids of protein E6 of HPV
16, the deletion from E6 destroys the transforming properties of the
transcript. The L1-E6 fusion gene was excised and inserted into
adenovirus-based virus ***vector*** pUC2.

L23 AN 1996:462867 CAPLUS (Copyright (C) 2006 ACS)
AN 1996:462867 CAPLUS
DN 125:155130
TI ***Papilloma*** virus-like particles containing foreign protein for
vaccines
IN ***Gissmann, Lutz*** ; Zhou, Jian; Mueller, Martin
PA Medigene Gesellschaft zur Entwicklung Medizinischer Therapie und
Diagnostik MBH, Germany; Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2
PATENT NO. KIND DATE APPLICATION NO.
DATE
---------- ---- -------- ---------- --------
PI DE 4435907 A1 19960411 DE 1994-4435907 19941007
DE 4435907 C2 19970724
DE 4447664 C2 19990415 DE 1994-4447664 19941007
CA 2202080 AA 19960418 CA 1995-2202080 19951009
WO 9611272 A2 19960418 WO 1995-EP3974
19951009
WO 9611272 A3 19960926
W: AU, BR, CA, JP, MX, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9642701 A1 19960502 AU 1996-42701 19951009
EP 809700 A1 19971203 EP 1995-934663 19951009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
JP 11504801 T2 19990511 JP 1995-512335 19951009
US 6066324 A 20000523 US 1997-817335 19971002
PRAI DE 1994-4435907 19941007
DE 1995-19526752 19950721
WO 1995-EP3974 19951009
AB ***Papilloma*** virus-like particles are prepd. contg. recombinant
viral structural proteins L1 and/or L2 in which segments of these proteins
are deleted and may be replaced with other proteins (e.g. viral early
proteins) or protein fragments. These particles may be used in vaccines
against tumors of the reproductive tract, e.g. cervical carcinoma

L23 AN 96211865 MEDLINE DUPLICATE 1
AN 96211865 MEDLINE
DN 96211865
TI Expression of CD80 enhances immunogenicity of cervical carcinoma cells in
vitro.
AU Kaufmann A.M. ***Gissmann L*** , Street D., Schreckenberger C., Hunter M., Qiao L.
CS Department of Obstetrics and Gynecology, Loyola University Medical Center, Maywood, Illinois 60153, USA.
SO CELLULAR IMMUNOLOGY, (1996 May 1) 169 (2) 246-51.
Journal code: 0060337. ISSN: 0008-8749.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals; Cancer Journals
EM [illegible]
AB [illegible] high-risk human papillomavirus (HPV) types express the human ***papillomavirus*** virus proteins E6 and E7, that can induce an effective [illegible] response. This failure may be due to a lack of expression of co-stimulatory molecules such as CD80 (B7.1). To augment the immunogenicity of cervical carcinoma cells, we transfected human ***papillomavirus*** (HPV) transformed cell lines, CaSki and SiHa, with the CD80 gene under ***control*** pEF. Alloantigen on the tumor cells was used for the stimulation of peripheral blood lymphocytes (PBL) in co-cultivation of PBL and tumor cells resulted in proliferation of CD4+ and CD8+ lymphocyte subsets. CD80+ expressing tumor cells induced proliferation of allogeneic PBLs two-to sixfold compared to control cell lines. Cocultivation of allogeneic PBL with CD80+ positive tumor cells for 3 weeks gave rise to cytotoxic T cells capable of lysing untransfected parental tumor cell lines. Our results demonstrate an immunostimulatory effect of CD80 expression on cervical cancer cells, which provides a basis for the development of a therapeutic tumor vaccine

L23 ANSWER [illegible] OF 12 MEDLINE DUPLICATE 2
AN 96339744 MEDLINE
DN 96339744
TI The E6 variant proteins E6I-E6IV of human ***papillomavirus*** 16 expression in cell free systems and bacteria and study of their interaction with p53
AU Shally M.; Alloul N.; Jackman A.; Mueller M. ***Gissmann L.***; Sherman L.
CS Department of Human Microbiology, Sackler School of Medicine, Tel Aviv University, Israel
SO VIROLOGY RESEARCH (1996 Jun) 42 (1-2) 81-96
Journal code: X98; ISSN: 0168-1702
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199702
EW 19970204
AB Several species of alternatively spliced mRNA were detected from the E6 gene region of human ***papillomavirus*** (HPV) 16. These have the coding capacity for either the full length [illegible] amino acids (aa) or [illegible] the putative E6 variants and their functions, we generated cDNA corresponding to the [illegible] open reading frame (ORF) and examined their expression in rabbit reticulocyte transcription translation systems and the bacterial pET [illegible] system. In both systems translation resulted in the production of all five proteins: E6 and E6I-E6IV. These proteins were also expressed and the fusion proteins from the pET Hob and [illegible] ***vector*** were [illegible] Modalities of the E6 variant proteins [illegible] were consistent with their predicted sizes. The authenticity of the in vitro translated proteins was confirmed by immunoprecipitation with specific antibodies directed against epitopes in the N-terminal portion of E6 as well as antibodies raised against the individual variant proteins produced in E. coli. In rabbit reticulocyte lysate, however, only the full length E6 and the E6IV variant were [illegible] due to inefficient translation as well as lower stability of the short variants. E6I-III in reticulocyte lysate (RTL). The ability of the E6 variants to associate with p53 and target its proteolytic degradation in vitro was examined in coimmunoprecipitation [illegible] using in vitro translated proteins and monoclonal antibodies to p53. Results of these experiments indicate that only the full length E6 efficiently binds to and promotes the degradation of p53. The E6 variants E6I-E6IV, although able to associate with p53 at a low efficiency, were unable to target its degradation

L23 ANSWER [illegible] OF 12 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1995:115991 BIOSIS
DN PREV199598130291
TI Antibodies to the E4, E6, and E7 proteins of human ***papillomavirus***
(HPV) type 16 in patients with HPV-associated diseases and in the normal population
AU Mueller, Marian [illegible]; Viscidi, Raphael P.; Peters, Vera; Preisler, Jan; Nieto, Rosa; Bouwes, Bill; Peter, M.; Fischer, Gudrun; Reid, Richard; Santos, Nubia; Schneider, Achim; Ghali, Geert; [illegible] ***Gissmann, Lutz***
CS [illegible] Abteilung Virusonkologie, Virologie, Univ Klin Med Cent, Postf 105, 2160 S First Avenue, Maywood, IL 60153, USA
SO Journal of Investigative Dermatology (1995) Vol. 104, No. 1, pp. 138-141
ISSN: 0022-202X
DT Article
LA English
AB In a case-control study, antibodies to the E4 and E7 proteins of human ***papillomavirus*** (HPV) type 16 were measured by [illegible] immunoblot assay in 1797 sera. 2,253 were obtained from healthy individuals (ages 1 to 95 years) from patients with HPV-associated infection, cervical intraepithelial neoplasia and cervical cancer, and from patients who were at high risk for HPV infection (attending a [illegible] transmitted disease clinic or referred to a colposcopist because of an abnormal Papanicolaou smear). The prevalence of anti-E7 antibodies increased with age, although the overall prevalence in the adult population was low (10.36%) compared to the frequent detection of HPV 16 DNA in the population. This suggests that only a fraction of patients infected with HPV 16 develop an anti-E7 response. The age distribution of anti-E4 antibodies showed a different pattern, i.e., the prevalence was low in the adult population (1.14%) but exceeded 20% in children and teenagers. As the specificity of the anti-E4 reaction was supported by a highly significant association with anti-E6 positivity in children's sera ($p < 0.0002$), it was assumed that infection with HPV 16 can occur frequently early in life. As compared to healthy controls, patients at high risk for HPV infection had a significantly higher frequency ($p < 0.001$) of antibodies to the HPV 16 E4 protein (but not to the E6 or the E7 protein) in their sera. Therefore, we conclude that in adults E4-specific antibodies may be a marker for virus replication

L23 ANSWER [illegible] OF 12 MEDLINE DUPLICATE 3
AN 94047301 MEDLINE
DN 94047301
TI Efficient self-assembly of human ***papillomavirus*** type 16 L1 and L1-L2 into virus-like particles
AU Kirnbauer R.; Taub J.; Greenstone H.; Roden R.; Durst M.; ***Gissmann L.***; Lowy D.R.; Schiller J.T.

CS Laboratory of Cellular Oncology, National Cancer Institute, Bethesda, Maryland 20892.
SO JOURNAL OF VIROLOGY, (1990 Dec) 64 (12) 6264-70.
Journal code: KQV. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199102
AB The L1 genes of two human ***papillomaviruses*** (types 16 (HPV16) and 6b (HPV6b)) were derived from newly isolated genomic clones and used to express the L1 major capsid protein in ***vero*** cells via a recombinant baculovirus. Both L1 major capsid proteins self-assembled into empty virus particles (VLPs) with high efficiency and could be purified to near homogeneity on density gradients. The yield of VLP was 3 orders of magnitude higher than what has been obtained previously, using L1 derived from the prototype HPV16 DNA sequence comparison identified a single nonconserved amino acid change to be responsible for the inefficient self-assembly of the prototype L1. VLP were also obtained by expressing L1 of HPV6, HPV11, and cottontail rabbit ***papillomavirus*** (CRPV), indicating that L1 from a variety of ***papillomaviruses*** has the intrinsic capacity to self-assemble into VLP. Coexpression of HPV16 L1 plus L2 by using a baculovirus double-expression ***vector*** also resulted in efficient self-assembly of VLP, and the average particle yield increased about fourfold in comparison to when L1 only was expressed. Communoprecipitation of L1 and L2 and cosedimentation of the two proteins in a sucrose gradient demonstrated that L2 was incorporated into the particles. The ability to generate preparative amounts of HPV16 L1 and L1-L2 VLP may have implications for the development of a serological assay to detect anti-HPV16 virion immune responses to conformational epitopes and for immunoprophylaxis against HPV16 infection.

L23 ANSWER 11 OF 12 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V. DUPLICATE 4
AN 82102914 EMBASE
DN 1982102914
TI [35] Molecular cloning and partial nucleotide sequence of human ***papillomavirus*** type 1a DNA.
AU Chad A.; ***Grissmann L.***; Meier B.; et al.
CS Inst. Virol. Zent. Hyg., Univ. Freiburg, 7800 Freiburg, Germany
SO Virology, (1982) 118, 1 (254-259).
CODEN: VIRLAX
CY United States
DT Journal
FS 047 Virology
016 Cancer
029 Clinical Biochemistry
022 Human Genetics
LA English
AB ***Papillomas*** are benign epithelial tumors of ***vertebrates*** [1]. They belong to the papovavirus group and induce epithelial proliferation in a variety of animal species and in man. To date, eight types of ***papillomaviruses*** have been identified in different individuals ***papillomas***, some of which show an increased tendency for malignant conversion. Due to the inability to propagate ***papillomaviruses*** in tissue culture, almost nothing is known about their genetic organization and gene expression. The recent development of DNA cloning techniques now renders it possible to study in detail the molecular biology of ***papillomaviruses***. Here we report the molecular cloning of the DNA of human ***papillomavirus*** type 1a (HPV1a) in Escherichia coli using pBR 322 as ***vector*** and the nucleotide sequence of part of the HPV1a genome. The region of 1870 base pairs contains one of two pairs of short inverted repetitive sequences detected earlier by electron microscopic studies. Within the DNA sequence, three potential coding regions of only one orientation have been observed which allows prediction of the direction of transcription in this part of the HPV1a genome.

L23 ANSWER 12 OF 12 MEDLINE DUPLICATE 5
AN 82101130 MEDLINE
DN 82101130
TI Molecular cloning of viral DNA from human genital warts.
AU de Villiers E.M.; ***Grissmann L.***; zur Hausen H.
SO JOURNAL OF VIROLOGY, (1981 Dec) 40 (3) 932-5.
Journal code: JOV. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198205
AB The DNA of human ***papilloma*** virus type 6 (HPV 6) has been cloned in Escherichia coli K-12 by using pBR322 as ***vector***. The DNA was cloned at the BamH I and EcoR I cleavage sites. The cloned DNA was mapped by employing further restriction endonucleases and by terminal labeling. No major differences were noted as compared to HPV 6 DNA originating directly from a genital wart. The existence of at least two types (HPV 6a and 6b) became apparent.

e mueller martin au

E1	2	MUELLER S MARKUS THEMISTOKLES AU
E2	1	MUELLER SAMANTHA AU
E3	729	MUELLER MARTIN AU
E4	1	MUELLER MARTIN [illegible] AU
E5	74	MUELLER MARTIN DIPLING AU
E6	1	MUELLER MARTIN [illegible] DR AU
E7	18	MUELLER MARTIN DR AU
E8	4	MUELLER MARTIN [illegible] AU
E9	1	MUELLER MARTIN E AU
E10	1	MUELLER MARTIN [illegible] MD AU
E11	56	MUELLER MARTIN J AU
E12	2	MUELLER MARTIN L AU

s e3-e12

L24 880 ("MUELLER"/AU OR "MUELLER S"/AU OR "MUELLER MARTIN DIPLING"/AU OR "MUELLER MARTIN E"/AU OR "MUELLER MARTIN J"/AU OR "MUELLER MARTIN L"/AU OR "MUELLER MARTIN M"/AU OR "MUELLER MARTIN R A"/AU OR "MUELLER MARTIN S"/AU OR "MUELLER MARTINA"/AU OR "MUELLER MARTINE"/AU OR "MUELLER MARTITHIAS"/AU OR "MUELLER MARUSHEL"/AU OR "MUELLER MARVIN C"/AU)

e mueller martin l au

E1	1	MUELLER MARTIN [illegible] MD AU
E2	56	MUELLER MARTIN J AU
E3	2	MUELLER MARTIN L AU
E4	2	MUELLER MARTIN M AU
E5	1	MUELLER MARTIN S [illegible] AU
E6	3	MUELLER MARTIN R A AU
E7	8	MUELLER MARTIN S AU
E8	43	MUELLER MARTINA AU
E9	1	MUELLER MARTINE AU
E10	1	MUELLER MARUTHIAS AU
E11	1	MUELLER MARUSHEL AU
E12	2	MUELLER MARVIN C AU

s e4-e7

L25 14 ("MUELLER MARTIN L"/AU OR "MUELLER MARTIN M"/AU OR "MUELLER MARTIN R A"/AU OR "MUELLER MARTIN S"/AU)

s 124 or 125

L26 894 L24 OR L25

s l26 and (papilloma? ab/bi

L27 s L26 AND (papilloma? AB/BI

s l27 and vector? ab/bi

L28 5 L27 AND (VECTOR? AB/BI

d 1-5 bib ab

L29 ANSWER 1 OF 5 DGENE COPYRIGHT 2001 EPO

LEVEL 1
AN ***
TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS ASSOCIATED WITH ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF
PA DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OEFFENTLICHEN RECHTS
PAS DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OEFFENTLICHEN RECHTS
PAA DE
TL English, French, German
LA German
DT Patent
PIT EPAT PUBL OF APPLICATION WITH SEARCH REPORT
PI EP 917860 A1 19990526
DS R: AT BE CH DE DK ES FR GB IT LI NL SE
AI EP 1997-935500 A 19970730
PRAI WO 1997-DE1629 W 19970730
DE 1996-19631357 A 19960802

L29 ANSWER 2 OF 5 INPADOC COPYRIGHT 2001 EPO

LEVEL 1
AN 461b5873 INPADOC UW 199809 UW 199843
TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS ASSOCIATED WITH ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF
IN KLEINSCHMIDT JUERGEN; JOCHMUS INGRID; GISSMANN LUTZ; ***MUELLER MARTIN***
GB96JA96 JUERGEN KLEINSCHMIDT; INGRID JOCHMUS; LUTZ GISSMANN; ***MARTIN MUELLER***
EQ KLEINSCHMIDT JUERGEN; JOCHMUS INGRID; GISSMANN LUTZ; ***MUELLER MARTIN***
GB96JA96 JUERGEN KLEINSCHMIDT; INGRID JOCHMUS; LUTZ GISSMANN; ***MARTIN MUELLER***
*** MAKHEN***
PAA DE DE DE US
PA DEUTSCHES KREBSFORSCHUNGSZENTRUM
STIFTUNG DES OEFFENTLICHEN RECHTS
PAS DEUTSCHES KREBSFORSCHUNGSZENTRUM
PAA DE
TL English, French, German
LA German
DT Patent
PIT EPAT PUBL OF APPLICATION WITH SEARCH REPORT
PI EP 917860 A1 19990526
DS R: AT BE CH DE DK ES FR GB IT LI NL SE
AI EP 1997-935500 A 19970730
PRAI WO 1997-DE1629 W 19970730
DE 1996-19631357 A 19960802

L29 ANSWER 3 OF 5 INPADOC COPYRIGHT 2001 EPO

LEVEL 1
AN 461b5873 INPADOC UW 199809 UW 199843
TI ***VECTOR*** FOR ACTIVATING THE IMMUNE SYSTEM AGAINST CELLS ASSOCIATED WITH ***PAPILLOMA*** VIRUSES OR SEQUENCES THEREOF
IN KLEINSCHMIDT JUERGEN; JOCHMUS INGRID; GISSMANN LUTZ; ***MUELLER MARTIN***
GB96JA96 JUERGEN KLEINSCHMIDT; INGRID JOCHMUS; LUTZ GISSMANN; ***MARTIN MUELLER***
EQ KLEINSCHMIDT JUERGEN; JOCHMUS INGRID; GISSMANN LUTZ; ***MUELLER MARTIN***
GB96JA96 JUERGEN KLEINSCHMIDT; INGRID JOCHMUS; LUTZ GISSMANN; ***MARTIN MUELLER***
*** MAKHEN***
PAA DE DE DE US
PA DEUTSCHES KREBSFORSCHUNGSZENTRUM
STIFTUNG DES OEFFENTLICHEN RECHTS
PAS DEUTSCHES KREBSFORSCHUNGSZENTRUM
PAA DE
TL English, French, German
LA German
DT Patent
PIT WOAT PUBL OF THE INT APPL WITH INT SEARCH REPORT
PI WO 9805790 A1 19980212
DS RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
AI WO 1997-DE1629 A 19970730
PRAI DE 1996-19631357 A 19960802

L29 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2001 ACS
AN 1998:102997 CAPLUS
DN 128:153148
TI Method for activating the immune system against cells associated with
papilloma viruses or their sequences
IN Kleinschmidt, Juergen; Jochmus, Ingrid; Gissmann, Lutz; ***Mueller ***
Martin
PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI DE 19631357 A1 19980205 DE 1996-19631357 19960802
WO 9805790 A1 19980212 WO 1997-DE1629 19970730
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 917860 A1 19990526 EP 1997-935500 19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
PRAI DE 1996-19631357 A 19960802
WO 1997-DE1629 W 19970730
AB A vaccine against cells infected with human ***papillomavirus*** (HPV) comprises a ***vector*** containing a nucleic acid which encodes a fusion protein comprising the fusion transforming peptide consisting of structural ***papillomavirus*** epitope peptide and a fusion transforming peptide encoded by an early ***papillomavirus*** gene. The latter gene reading frame (ORF) encoding C-terminally truncated major capsid protein L1 of HPV 16 was amplified by PCR, inserted into ***vector*** pUC19 and ligated to an ORF fragment encoding the 1st 50 amino acids of protein E6 of HPV 16, the deletion from E6 destroys the transforming properties of the transcript. The L1-E6 fusion gene was excised and inserted into adeno-assoc. virus ***vector*** pUC2

L29 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2001 ACS
AN 1996:326231 CAPLUS
DN 125:84475
TI ***Papilloma*** virus-like particles containing fusion proteins for vaccines
IN Gissmann, Lutz; Shou, Huan; ***Mueller, Martin***
PA Medigene Gesellschaft fuer Medizinalbiologische Diagnostik Therapie und Technologie m.b.h., FRG
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2
PATENT NO. KIND DATE APPLICATION NO. DATE
PI DE 4435907 A1 19960411 DE 1994-4435907 19941007
DE 4435907 C2 19970724
DE 4447664 C2 19980415 DE 1994-4447664 19941007
CA 2202090 AA 19960418 CA 1995-2202090 19951009
WO 9611272 A2 19960418 WO 1995-EP3974 19951009
WO 9611272 A3 19960926
W: AU, BR, CA, JP, MX, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9642701 A1 19960502 AU 1996-42701 19951009
EP 809700 A1 19971203 EP 1995-934663 19951009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
JP 11504801 T2 19990511 JP 1995-512335 19951009
US 6066324 A 20000523 US 1997-817335 19971002

PRAI DE 1994-4435907 19941007
DE 1995-19526752 19950721
WO 1995-EP3974 19951007
AB ***papillomavirus*** virus-like particles are prepd. comp. recombinant
viral structural proteins L1 and or L2 in which segments of these proteins
are deleted and or replaced with other proteins (e.g. viral early
proteins) or protein fragments. These particles may be used in vaccines
against tumors of the reproductive tract (e.g. cervical carcinoma

L29 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1995:235991 BIOSIS
DN PREV199598130291
TI Antibodies to the E4, E6, and E7 proteins of human ***papillomavirus***
(HPV) type 16 in patients with HPV-associated diseases and in the normal
population
AU ***Iuellet Martin*** Viscidi Raphael P. Ellerbrock Vera Bavinck, Jan Nico Bouwes; Hu Peter M. Fisher Susan G. Reid Richard Munoz
Nadim Schneider Adam Shah Feroz V. Gissmann Lutz
CS (1) Dep. Obstetrics Gynecology Loyola Univ. Med. Cent., Build 105, 2160
S. First Avenue, Maywood, IL 60153 USA
SO Journal of Investigative Dermatology, (1995) Vol. 104, No. 1, pp. 138-141.
ISSN: 0022-202X
DT Article
LA English
AB In a cross-sectional study, titers of antibodies to the E4 and E7 proteins
of human ***papillomavirus*** (HPV) type 16 were measured by
peptide-based enzyme-linked immunosorbent assay in 1707 sera. Sera were
obtained from healthy individuals (ages 1 to 95 years), from patients with
HPV-associated infection (cervical intraepithelial neoplasia and cervical
cancer), and from patients who were at high risk for HPV infection
(attending a sexually transmitted disease clinic or referred to a
colposcopist because of an abnormal Papanicolaou smear). The prevalence of
anti-E7 antibodies increased with age, although the overall prevalence in
the adult population was low (10.36%) compared to the frequent detection
of HPV 16 DNA in the population. This suggests that only a fraction of
patients infected with HPV 16 develop an anti-E7 response. The age
distribution of anti-E4 antibodies showed a different pattern, i.e., the
prevalence was low in the adult population (1.14%) but exceeded 20% in
children and teenagers. As the specificity of the anti-E4 reaction was
supported by a highly significant association with anti-E7 positivity in
children's sera ($p < 0.0002$), it was assumed that infection with HPV 16 can
occur frequently early in life. As compared to healthy controls, patients
at high risk for HPV infection had a significantly higher frequency ($p < 0.001$) of antibodies to the HPV 16 E4 protein (but not to the E6 or the E7
protein) in their sera. These findings conclude that in adults E4-specific
antibodies may be a marker for virus replication

e muller martin ab,bi

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AB
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AB
'AB' IS NOT A VALID FIELD CODE FOR FILE 'BIOSIS'
E1 5479 MULLER BI
E2 0 --- MULLER MARTIN AB
E3 0 --- MULLER MARTIN BI
E4 1 MULLER2 AB
E5 1 MULLER2 BI
E6 1 MULLER3 AB
E7 1 MULLER3 BI
E8 4 MULLERA BI
E9 5 MULLERAF BI
E10 1 MULLERALIS BI
E11 2 MULLERAN BI
The indicated field code is not an allowable one for ENFAND at this file. To see a list of valid ENFAND field codes, enter HELP SFIELDS at an arrow prompt (=>).

e muller martin au

E1 1 MULLER MARTHINUS AU
E2 5 MULLER MARTIN AU
E3 109 --- MULLER, MARTIN AU
E4 7 MULLER MARTIN DIPL PSY AU
E5 3 MULLER MARTINE AU
E6 [illegible] MULLER MARTINI AU
E7 2 MULLER MARTINKA AU
E8 14 MULLER MARTINA AU
E9 3 MULLER MARTITZ AU
E10 1 MULLER MARWITZ VOLKER AU
E11 1 MULLER MARY E AU
E12 1 MULLER MARY MICHELLE AU
s e3-e7

L30 [illegible] AU ("MULLER MARTIN" OR "MULLER MARTINUS" OR "MULLER, MARTIN" OR "MULLER MARTIN DIPL PSY" OR "MULLER MARTINE" OR "MULLER MARTINI" OR "MULLER MARTINKA" OR "MULLER MARTINA" OR "MULLER MARTITZ" OR "MULLER MARWITZ VOLKER" OR "MULLER MARY E" OR "MULLER MARY MICHELLE")

s l30 and papilloma? ab,bi

'AB' IS NOT A VALID FIELD CODE
L31 33 L30 AND PAPILLOMA? AB,BI

s l31 and vector# ab,bi

'AB' IS NOT A VALID FIELD CODE
L32 2 L31 AND VECTOR# AB,BI

dup rem l32

PROCESSING COMPLETED FOR L32
L33 1 DUP REM L32 (1 DUPLICATE REMOVED)

d

L33 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2001 BIOSIS
DUPLICATE 1
AN 1996:379848 BIOSIS
DN PREV199699102204
TI The E6 variant proteins E6I-E6IV of human ***papillomavirus*** 16
Expression in cell free systems and bacteria and study of their interaction with p53
AU Shally, Maya; Alloul, Natalie; Jackman, Anna; ***Muller, Martin***; Sherman, Lutz Gissmann Adn Levana (1)
CS (1) Dep. Human Microbiol., Sackler Sch. Med., Tel Aviv University, Tel Aviv 69978 Israel
SO Virus Research, (1996) Vol. 42, No. 1-2, pp. 81-96.
ISSN: 0168-1702
DT Article
LA English

d ab

L33 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2001 BIOSIS
DUPLICATE 1
AB Several species of alternatively spliced mRNAs are transcribed from the E6
gene region of human ***papillomavirus*** (HPV) 16. These have the
coding capacity for either the full length E6 of 151 amino acids (aa) or
four truncated variants, E6I-E6IV, of 42-64 aa. As the first step to

identify the predominant variants and their functions were generated cDNAs
corresponding to the various E6 open reading frames (ORF) and examined
their capacities in supporting in vitro transcription-translation systems and
the bacterial [illegible] system. In wheat germ extract in vitro translation
resulted in the production of all five protein E6 and E6I-E6IV. These
proteins [illegible] and pET17b and
pET17 tumor [illegible] in Escherichia coli. Solubilities of the E6
variant proteins and their amino acid sequences were consistent with their
predicted sizes. The authenticity of the synthesized proteins was
confirmed by immunoprecipitation with specific antibodies directed against
epitopes in the [illegible] portion of E6 as well as anti-sera raised
against the individual variant proteins produced in E. coli. In rabbit
reticulocyte lysate, however, only the full length E6 and the E6IV variant
were synthesized. This could be due to inefficient translation as well as
lower stability of the short variants. E6I-III in reticulocyte lysate
(RTL). The ability of the E6 variants to associate with p53 and target its
proteolytic degradation in vitro was examined in communoprecipitation
assays using in vitro synthesized proteins and monoclonal antibodies to
p53. Results of these assays indicated that only the full length E6
efficiently binds to and promotes the degradation of p53. The E6 variants
E6I-E6IV, although able to associate with p53 at a low efficiency, were
unable to target its degradation.

d his

(FILE 'HOME' ENTERED AT 17:35:02 ON 23 JAN 2001)

FILE 'MEDLINE' ENTERED AT 17:35:07 ON 23 JAN 2001
L1 413 S PAPILLOMA? AND VACCINE# AB,BI
L2 967 S ADENO ASSOCIATED AB,BI
L3 15 S L2 AND VACCINE# AB,BI
L4 1 S L1 AND L3

FILE 'HOME' ENTERED AT 17:38:59 ON 23 JAN 2001
L5 9 S L4
L6 6 DUP REM L5 (3 DUPLICATES REMOVED)
L7 114 S L5
L8 92 S L7 AND PAPILLOMA? AB,BI
L9 6 DUP REM L8 (86 DUPLICATES REMOVED)
E KLEINSCHMIDT J/AU
E KLEINSCHMIDT J A/AU
L10 30 S E2-E4
L11 1 S L10 AND (PAPILLOMA? AB,BI
E JOCHMUS I/AU
L12 79 S E2-E4
L13 5 S L12 AND (PAPILLOMA? AB,BI
L14 1 S L13 AND VACCINE# AB,BI
L15 2 DUP REM L13 L14 (3 DUPLICATES REMOVED)
L16 6 S L13 AND VACCINE# AB,BI
L17 4 DUP REM L13 L16 (2 DUPLICATES REMOVED)
E ORLOWSKA A/AU
L18 626 S E2-E6
L19 547 S L18 AND PAPILLOMA? AB,BI
L20 243 S L19 AND (E6 OR E6I OR E6II OR E6III OR E6IV OR E6V) AB,BI
L21 1 S L20 AND PUF/AB,BI
L22 3 S L20 NOT L21
L23 12 DUP REM L20 L21 L22 (3 DUPLICATES REMOVED)
E MULLER M/AU
L24 880 S E3-E12
E MULLER M A/AU
L25 14 S E4-E7
L26 894 S L24 OR L25
L27 50 S L26 AND PAPILLOMA? AB,BI
L28 5 S L27 AND VECTOR# AB,BI
L29 2 DUP REM L26 L27 L28 (3 DUPLICATES REMOVED)
E MULLER M/AU
E MULLER M A/AU
L30 191 S E3-E7
L31 33 S L30 AND PAPILLOMA? AB,BI
L32 2 S L31 AND VECTOR# AB,BI
L33 1 DUP REM L32 (1 DUPLICATE REMOVED)

file medline

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FILE 'MEDLINE' ENTERED AT 17:54:43 ON 23 JAN 2001

FILE LAST UPDATED: 27 OCT 2000 (20001027/UP). FILE COVERS 1960 TO DATE

Several MeSH fields, including CT and MN fields, incorporate the MeSH 2000 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE segment now contains data from 1956 through 1965.
Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the
Basic Index. See HELP SELECT for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR MANY SUBSTANCES AND ACCEPTS
SUBSTANCE IDENTIFICATION

MEDLINE(R) RECORDS ARE CURRENTLY UPDATED DAILY, AFTER THE ARTICLES ARE [illegible]
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IS COMPLETED AND
RECORDS ARE [illegible]

papilloma? and fusion and vaccine# ab,bi

21139 PAPILLOMA?
30359 FUSION
[illegible]
5453647 AB,EA
36155 VACCINE# AB
(VACCINE# BI (L) AB,EA)
88249 VACCINE# BI
L34 36 PAPILLOMA? AND FUSION AND VACCINE# AB,BI

l34 and vector# ab,bi

67027 VECTOR# BI
5453647 AB,EA
42987 VECTOR# AB
(VECTOR# BI (L) AB,EA)
67027 VECTOR# BI
L35 6 L34 AND VECTOR# AB,BI

d l- bib ab

YOU HAVE REQUESTED DATA FROM 6 ANSWERS -
CONTINUE? Y (C) Y

L35 ANSWER 1 OF 6 MEDLINE
AN 2000348983 MEDLINE
DN 20348983
TI Recombinant adeno-associated virus expressing human
papillomavirus
type 16 L7 peptide fused with heat shock protein DNA as a
potential
vaccine for cervical cancer
AU Liu D W; Lin C T; Chang J T; Ding T A; Chow K H; Yang Y C; Chen S L
CS Department of Microbiology and Immunology, Taipei, Taiwan, Republic of
China
SO JOURNAL OF VIROLOGY, (2000 Mar) 74 (6) 2888-94
Journal code: KCV. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals; Cancer Journals
EM 200006
EW 20000602
AB In this study we explored the potential of ***papillomavirus*** virus-like particles (VLPs) as a vaccine against ***papillomavirus*** -induced tumors. Using recombinant vaccinia viruses expressing the E7 protein as an antigen, we found that immunization with VLPs, but not with a peptide ***vaccine*** containing the major CTL epitope, induced protective immunity against challenge with tumorigenic cells. Immunization with VLPs also induced regression of established tumors. Depletion of CD4+ or CD8+ T cells in vivo revealed that both subsets contribute to the protective response. Finally, VLPs were effective in inducing tumor rejection in mice that had been immunized with a vaccinia virus expressing the E7 protein. These results indicate that VLPs are highly effective ***vaccine*** candidates and suggest that they may be useful in the immunotherapy of papillomavirus-induced tumors.
AU Da Silva DM
Skeate JG
Lee JH
Kast WM
CS Department of Molecular Microbiology and Immunology, University of Southern California, Los Angeles 90033, USA.
SO VACCINE (2000 Jun 9) 18 (26) 3010-5
JC Journal code: 8406899. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199706
EW 19970601
AB The presence and consistent expression of the genes encoding the human ***papillomavirus*** (HPV) E6 and E7 proteins in the great majority of cervical tumours presents the opportunity for an immunotherapeutic approach for control of the disease. This report describes the construction and characterization of a vaccinia virus recombinant designed to express a modified form of the E6 and E7 proteins from HPV-16 and HPV-18. The vaccinia virus recombinant, designated VA-HPV-gw-16/18, was evaluated as a ***vaccine*** strain. Subcutaneous and intradermal vaccination of mice with this recombinant virus induced a potent cytotoxic T lymphocyte (CTL) response specific for the major CTL epitope. Therapeutic studies showed that this recombinant virus was also able to induce the regression of established tumors.

L35 ANSWER 3 OF 3 MEDLINE
AN 98100859 MEDLINE
DN 98100859
TI Immunization with a recombinant commensal streptococcus.
AU Oggioni M R; Pozzi G; Valensin P E; Galieni P; Bigazzi C
CS Dipartimento di Biologia Molecolare, Universita di Siena, Italy.
SO VACCINE (1995) 13 (8) 773-9
JC Journal code: 8406899. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199602
AB To test the use of recombinant streptococci as live ***vaccine*** vectors, colonization studies in experimental mice were performed with Streptococcus gordonii expressing heterologous cell surface antigens. Three recombinant strains of S. gordonii were used: a wild-type recombinant expressing the M6 protein of Streptococcus pyogenes, and a recombinant expressing the E7 protein of human ***papillomavirus*** type 16 (Hpv16) fused to the M6 protein. A single dose of 10 bacteria was used to inoculate outbred mice, and it was found that (i) mice were stably colonized by a single intranasal or oral or vaginal dose of S. gordonii, (ii) recombinant strains were equally effective as wild-type in colonizing mice, (iii) two months after the inoculum, oral pharyngeal swabs of 82.3% of animals were still positive for re-isolation of S. gordonii, (iv) recombinant S. gordonii-vaginal and oral immunizations were effective in inducing systemic immunity to the heterologous antigens. The latter immune response was characterized by recombinant S. gordonii strains that specifically for the heterologous cell surface antigens. (v) this immune response depended upon the ability of the colonizing strain to replicate, since killed bacteria did not induce such a response.

L35 ANSWER 4 OF 4 MEDLINE
AN 92225607 MEDLINE
DN 92225607
TI Molecular and biological characterization of a bacterial antigen of the attaching and effacing subgroup.
AU Oggioni M R; Pozzi G; Valensin P E; Maringola-Fox L; Tommassini M; Cavalieri F; Fischetti V A
CS Dipartimento di Biologia Molecolare, Universita di Siena, Italy.
SP AI33622 (NIAID)
SO J EXP MED (1992 Jan 1) 175 (1) 261-6. ISSN: 0022-1007.
JC Journal code: 0370657. ISSN: 0022-1007.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199207
AB We have developed a system in which foreign antigens replace nearly all the surface-exposed regions of the fibrillar M protein from Streptococcus pyogenes and is fused to the C-terminal attachment motif of the M molecule. The ***fusion*** protein is thus expressed on the surface of Streptococcus gordonii as a dimeric conformation of the oral cavity. The antigen chosen to be expressed within the context of the M6 molecule was the E7 protein (98 amino acids) of human ***papillomavirus*** type 16. Stable recombinant streptococci were obtained by integrating genetic constructs into the chromosome, exploiting an internal region of the M6 gene. The M6-E7 ***fusion*** protein expressed on the S. gordonii surface was shown to be immunogenic in mice. This is the first step in the construction of recombinant live ***vaccine*** ***, in which non-pathogenic streptococci as well as other gram-positive bacteria may be used as ***vectors*** to deliver heterologous antigens to the immune system.

L35 ANSWER 5 OF 5 MEDLINE
AN 91176248 MEDLINE
DN 91176248
TI The open reading frame L2 of cottontail rabbit

papillomavirus
contains antibody inducing neutralizing epitopes
AU [illegible]
CS Department of Pathology, [illegible]
Hershey
Pennsylvania 17033
NC CA47622-05(1)
SO VIROLOGY (1991 Apr) 181 (2) 572-9
Journal code: XEA ISSN: 0042-6822
CY United States
DT Journal Article (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199105
AB Polyclonal antisera were generated against baculovirus
fusion proteins that contained different portions of the capsid
proteins of cottontail rabbit ***papillomavirus*** (CRPV). The
carboxy-terminal two thirds of CRPV L1 and the carboxy-terminal half of
CRPV L2 were cloned into a bacterial expression ***vector*** and
induced proteins were used as antigen and immunogen. The polyclonal
antisera were tested in a series of immunological assays including
ELISA.
Western blot and neutralization. The CRPV L1 ***vaccine*** demonstrated that the
polyclonal antisera raised against expressed L1 proteins reacted strongly
to disrupted CRPV virion antigen and weakly both to intact CRPV virion and
disrupted BPV-1 virion. Anti-CRPV L2 antisera reacted strongly only to
intact and disrupted CRPV virion antigen. Viral capsid proteins of CRPV
were detected in Western blots of HPV-11, BPV-1, and CRPV virus particles
by these polyclonal antisera. The anti-L1 sera recognized the major capsid
protein (60 kDa) and the anti-L2 sera identified a 76-kDa viral protein of
CRPV. Only the antisera generated against expressed L2
neutralized CRPV.
The neutralizing titer of the anti-L2 sera however was several orders of
magnitude lower than the titer of a neutralizing polyclonal antiserum that
was generated by immunizations with intact CRPV virions.

L35 AN [illegible]
AU [illegible]
DN [illegible]
TI An antigen chimera of poliovirus inducing antibodies against human
papillomavirus type 16
AU Jenkins O; Calnan J; Burke E L; Lunney D; Gillen A; Patel D;
McCance D J
Almond J W
[illegible]
SO JOURNAL OF VIROLOGY, (1990 Mar) 64 (3) 1201-6
Journal code: JOV ISSN: 0022-538X.
CY United States
DT Journal Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199005
AB It has been established that the surface of poliovirus type 1 can be
[illegible] to incorporate antigenic domains from other
poliovirus serotypes and from unrelated viruses. The fact that the
resultant chimeric viruses exhibit dual antigenicity and
immunogenicity
[illegible] parentage of neither the Sabin ***vaccine***
strain of poliovirus type 1 as a ***vector*** for the presentation of
antigenic domains from human ***papillomavirus*** type 16
(HPV-16), a
virus associated with the development of cervical carcinoma. We report
here the construction and characterization of a chimeric poliovirus
containing a 16-residue sequence derived from the major capsid protein
(L1) of HPV-16. This virus chimera stimulated the production in rabbits of
antibodies which recognized the HPV-16 derived peptide and an L1
fusion protein synthesized in Escherichia coli and
detected HPV-16
in human biopsy material by immunoperoxidase staining. The possibility
that poliovirus-HPV chimeras could be used as ***vaccines*** against
HPV-16 is discussed

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CA SUBSCRIBER PRICE 0.00 -10.00

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FILE 'MEDLINE' ENTERED AT 17:26:27 ON 23 JAN 2001

L1	[illegible]
L2	[illegible]
L3	15 S L2 AND VACCINE+ AB,BI
L4	1 S L1 AND L2

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 17:38:59 ON 23 JAN 2001

L5	9 S L4
L6	6 DUP REM L5 (3 DUPLICATES REMOVED)
L7	114 S L3
L8	9 S L7 AND PAPILLOMA? AB,BI
L9	6 DUP REM L8 (3 DUPLICATES REMOVED)
	E KLEINSCHMIDT J/AU
	E KLEINSCHMIDT JURGEN/AU
L10	30 S E3-E4
L11	1 S L10 AND PAPILLOMA? AB,BI
	E JOCHEMUS INGRID/AU
L12	79 S E2-E4
L13	58 S L12 AND PAPILLOMA? AB,BI
L14	11 S L13 AND VACCINE+ AB,BI
L15	7 DUP REM L14 (4 DUPLICATES REMOVED)
L16	6 S L13 AND VECTOR? AB,BI
L17	6 DUP REM L16 (0 DUPLICATES REMOVED)
	E GISSMANN/AU
	E GISSMANN LUTZ/AU
L18	626 S E2-E6
L19	347 S L18 AND PAPILLOMA? AB,BI
L20	240 S L19 AND VECTOR? AB,BI
L21	1 S L20 AND PUF? AB,BI
L22	3 S L20 AND L2 AB,BI
L23	3 DUP REM L20 (2 DUPLICATES REMOVED)
	E MUELLER M/AU
	E MUELLER MARTIN/AU
L24	686 S E3-E12
	E MUELLER MARTIN L/AU
L25	14 S E4-E7
L26	894 S L24 OR L25
L27	76 S L26 AND PAPILLOMA? AB,BI
L28	5 S L27 AND VECTOR? AB,BI
L29	4 DUP REM L28 (1 DUPLICATES REMOVED)
	E MUELLER M/AU
	E MUELLER MARTIN/AU
L30	191 S E3-E7

L31 [illegible] AND EXPRESSION VECTOR

L32 [illegible] AND VECTOR

L33 [illegible] DUPLICATE REMOVAL

FILE MEDLINE

L34 [illegible] AND VECTOR

VACCINE OR ABBI

L35 [illegible]

FILE CAPLUS

E1 [illegible]

JAN 2001

L35

ADJ [illegible]

L36 52 L35

dup rem l36

PROCESSING COMPLETED FOR L37

L37 41 DUP REM L36 (11 DUPLICATES REMOVED)

s l36 and adeno? ab,bi

'AB' IS NOT A VALID FIELD CODE

L38 9 L36 AND (ADENO? OR AB)

dup rem l38

PROCESSING COMPLETED FOR L39

L39 7 DUP REM L38 (2 DUPLICATES REMOVED)

d l- bib ab

YOU HAVE REQUESTED DATA FROM A FILE YOU ARE NOT CONTINUOUSLY ENTITLED

L39 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2001 ACS

AN 2000:814317 CAPLUS

DN 133:361907

TI Compositions and methods for identifying antigens which elicit an immune response

IT Chen, Shi-Hsia; Wu, Tzyy-Choou

PA Wake Forest University, USA

SO PCT Int. Appl., 164 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000066771 A1 20001109 WO 2000-US12477 20000505

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-132752P 19990506

US 1999-132752 19990506

AB This invention relates to an expression ***vector*** wherein said expression ***vector*** comprises a polynucleotide promoter sequence, a polynucleotide encoding a signal sequence, a polynucleotide encoding an antigen protein or peptide, a polynucleotide encoding a cell binding element, and a polynucleotide polyadenylation sequence all operatively linked. More particularly, it relates to the method of eliciting an immune response directed against an antigen in a mammal comprising the steps of introducing the expression ***vector*** into a cell, expressing the ***vector*** to produce an antigen under conditions wherein the antigen is secreted from the cell, endocytosing the secreted antigen into the cell, processing the antigen, and presenting fragments to a receptor to elicit a T-cell response. In addn., this invention relates to a ***vaccine*** and a method of use. The invention also relates to the method of identifying MHC-II restricted epitopes.

RE.CNT 9

RE

(1) Berger, US 5587455 A 1996 CAPLUS

(2) Carson, US 5679647 A 1997 CAPLUS

(3) Commonwealth Scientific And Industrial Research Organisation; WO 9700321 A1 1997 CAPLUS

(4) Dranoff, US 5637483 A 1997 CAPLUS

(5) Johnston, US 5703057 A 1997 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 2 OF 7 MEDLINE DUPLICATE 1

AN 2000148983 MEDLINE

DN 20148983

TI Recombinant ***adeno*** -associated virus expressing human ***papillomavirus*** type 16 E7 peptide fused with heat shock protein DNA as a potential ***vaccine*** for cervical cancer.

AU Liu J Y; Yang G F; Kong Z L; Zhang Y; Wang H Y; Xu X X; Chen S H

CS Department of Pathology and Institute of Immunology, Taipei Medical College, Taipei, Taiwan, Republic of China

SO Acta pharmacologica Sinica (Acta Pharmacol Sin) (2000 Feb), 21 (2), 189-194

Journal code: KVX; ISSN: 0253-9756

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Cancer Journals

EM 200006

EW 20000602

AB In this study, we explore a potential ***vaccine*** for human ***papillomavirus*** (HPV)-induced tumors using heat shock protein as an adjuvant, a peptide ***vaccine*** for safety, and ***adeno*** -associated virus (AAV) as a gene delivery ***vector*** . The tumor ***vaccine*** was devised by constructing a chimeric gene which contained HPV type 16 E7 cytotoxic T-lymphocyte (CTL) epitope DNA (M. C. Feltkamp, H. L. Smits, M. P. Vierboom, R. P. M. Minnaar, P. M. de Jongh, J. W. Drijfhout, J. ter Schegget, C. J. M. Melief, and W. J. Kast, Eur. J. Immunol. 23:2242-2249, 1993) fused with the heat shock protein gene as a tumor ***vaccine*** delivered via AAV. Our results demonstrate that this ***vaccine*** can eliminate tumor cells in syngeneic animals and induce CD4- and CD8-dependent CTL activity in vitro. Moreover, studies with knockout mice with distinct T-cell deficiencies confirm that CTL-induced tumor protection is CD4 and CD8 dependent. Taken together, the evidence indicates that this chimeric gene delivered by AAV has potential as a cervical cancer ***vaccine***

L39 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2001 ACS

AN 2000:524030 CAPLUS

TI Construction and expression of an attenuated recombinant ***adenovirus*** of human ***papilloma*** virus type 16 L1-E7

AU Bian, Jifeng; Yu, Xiuping; Qi, Mei; Wang, Yun; Yang, Hanning; Hu, Haiyan; Geng, Zhao; Zhao, Weiming; Zhou, Yabin; Jia, Jihui

CS Laboratory of Molecular Biology and Dept. of Microbiology, Shandong Medical University, Jinan, 250012, Peop. Rep. China

SO Shandong Yike Daxue Xuebao (2000), 38(2), 113-116, 119

PB Shandong Yike Daxue
DT Journal
LA Chinese
AB An attenuated recombinant ***adenovirus*** ***vaccine*** against
HPV16 infection and human cervical cancer was constructed and developed
The plasmid pUC19-L1-E7 contained the major capsid protein L1 ORF and E7
ORF was constructed using polymerase chain reaction. The L1-E7 DNA
fragment was digested with HindIII and SmaI and inserted into pBluescript
named pBS-L1-E7, and then the L1-E7 cDNA fragment was cut with HindIII and
XbaI and inserted into ***adenovirus*** shuttle plasmid pCA14, and
co-transfected 293 cells with the ***adenovirus*** pBHG10 plasmid, the
recombinant ***adenovirus*** of HPV16 was harvested. The expression
level of the chimeric virus-like particle was detected using ELISA,
immunoassay and the electron microscopy. The ***fusion*** L1-E7
protein was expressed at the high level (10% of total cellular protein.
The cells could self-assembled into the chimeric virus-like particle
(cVLP), which was morphol indistinguishable from the native virus and
displayed the conformational epitopes. These data indicated that the
recombinant ***adenovirus*** of human ***papilloma*** virus type
16 L1-E7 was constructed and the L1-E7 ***fusion*** protein could be
expressed at high level, and could be self-assemble into the chimeric
virus-like particles in human cells. The recombinant pUC19-L1 plasmid was
an ideal ***vector*** for constructing other chimeric ***vaccine***
carried the epitopes derived from virus and tumor antigen

L39 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
SCI B V DUPLICATE 2
AN 2000:42658 CAPLUS
TI Construction of a recombinant ***adenovirus*** ***vector*** of
human ***papillomavirus*** type 16 L1-E7C
AU Bian J-F.; Tu X-F.; Wang Y.; Zhao W.-M.; Zhang L.-H.; Dong J-D.; Jia
J.-H.; Zhao Y.-B.; Luan Y.; Qu M.; Chen H-B
CS Key Lab. of Molecular Biology, Department of Microbiology,
Shandong Medical University, No. 44, Wenhua West Road, Jinan 250012,
China; cnxp@cajo.public.sd.cninfo.net
SO Chinese Journal of Cancer Research (2000), 12(1), 21-24
Refs: 16
ISSN: 1000-467X
CY China
DT Journal; Article
ES 004 Microbiology
GI 2c Immunology: Serology and Transplantation
LA English
SL English
AB Objective: Human ***papillomaviruses*** are closely associated with
human cervical cancer. Expression of HPV L1 protein and L2 protein, HPV can
not be produced in large quantity, and their immunogenicity and these
properties of HPV have retarded the development of HPV
vaccine. HPV type 16 L1 proteins can assembled into virus-like
particles (VLP), which are morphologically identical to the nature virion
In order to develop the recombinant ***adenovirus*** ***vectors***
of HPV, we constructed a recombinant ***adenovirus*** shuttle plasmid
pCA14 L1-E7C. Methods: Human ***papillomavirus*** type 16 L1 open
reading frame without terminator codon (TAA) (5589-7152) and E7C (682-855)
were amplified using PCR. The L1 and E7C fragments were inserted into
pGEM-T easy ***vectors*** by T/A strategy, named pTAL1 and pTAE7C.
pTAL1 was cut with Hind III and BglII, the pTAE7C with BamH I and ClaI. The
L1 DNA fragment, E7C and pBluescript SK were ligated together using T4
DNA ligase. pBSL1-E7C and pBSL1-E7C was digested with Hind III and XhoI.
The L1-E7C fragment was inserted into ***adenovirus*** shuttle
plasmids pCA14, named pCA14L1-E7C. DNA sequence results indicated that
The L1-E7C DNA fragment can encode the HPV16 L1-E7 ***fusion*** protein
correctly. Results: The L1 and E7C DNA fragments were amplified by PCR and
recombinant plasmid pTAL1, pTAE7C, pBSL1-E7C and pCA14L1-E7C were
constructed correctly. The pCA14L1-E7C can be used in the further research
work, cotransfected the 293 cell with the parent ***adenovirus***
pBHG10. Conclusion: Our results indicated that we have constructed a
HPV16L1-E7 ***fusion*** DNA fragments and the ***adenovirus***
shuttle plasmids pCA14L1-E7C for the further research

L39 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1999:166440 CAPLUS
DN 130:222110
TI ***Fusion*** proteins of human ***papillomavirus*** E6 and E7
stimulate a type 1 T-cell response
IN Pituck, Claudine; Cabrol, Denis; Peloux, Anne-Marie Rose Fernande;
Gerard, Catherine Marie Christine; Lambert, Pierre-Hugh; Angela
[illegible]; Biochain Biological S.A., Belg
SO PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9910375	A2	19990304	WO 1998-EP5285	19980817
WO 9910375	A3	19990610		
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DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,				
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,				
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,				
TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9892639	A1	19990316	AU 1998-92639	19980817
EP 1007551	A2	20000614	EP 1998-945269	19980817
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, FI				
BR 9812139	A	20000718	BR 1998-12139	19980817
NO 2000000850	A	20000414	NO 2000-850	20000221
PRAI GB 1997-17953		19970822		
WO 1998-EP5285		19980817		

AB The authors disclose the plasmid construction, expression, and purifn
from E. coli of human ***papillomavirus*** early proteins E6 and E7
linked to immunol active ***fusion*** partners. These ***fusion***
proteins elicit a Th1 helper cell response in immunized mice. Using an
E6 E7 HPV transformed epithelial cell line, a ***vaccine***

formulation protected against HPV-induced lesions and tumor development

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2001 ACS
AN 1993:17456 CAPLUS
DN 118:17456
TI Method for inactivating the immune system against cells associated with papilloma*** viruses or their sequences
IN Electricwala, Yezdegerd Sohrab; Ingold, Rosemarie Maria; Muenter, Martin
PA Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19631357	A1	19980205	DE 1996-19631357	19960802
WO 9805790	A1	19980212	WO 1997-DE1629	19970730
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 917586	A1	19990526	EP 1997-936941	19970730
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
PRAI DE 1996-19631357		19960802		
WO 1997-DE1629		19970730		

AB A ***vaccine*** against cells infected with human ***papillomavirus*** (HPV) comprises a ***vector*** containing a nucleic acid which encodes a ***fusion*** protein/peptide, where the ***fusion*** polypeptide consists of a structural ***papillomavirus*** (poly)peptide and a nontransforming (poly)peptide encoded by an early ***papillomavirus*** gene. Thus, the open reading frame (ORF) encoding C-terminally truncated major capsid protein L1 of HPV 16 was amplified by PCR, inserted into ***vector*** pUC19, and ligated to an ORF fragment encoding the 1st 50 amino acids of protein E6 of HPV 16, the deletion from E6 destroying the transforming properties of the transcript. The L1-E6 ***fusion*** gene was excised and inserted into ***adeno***-assoed virus ***vector*** pUF2.

L5 ANSWER 8 OF 7 CAPLUS COPYRIGHT 2001 ACS
AN 1993:17456 CAPLUS
DN 118:17456
TI Use of the purA gene as a selectable marker in stabilization and integration of plasmid or bacteriophage cloning ***vectors***
IN Electricwala, Yezdegerd Sohrab; Ingold, Rosemarie Maria; Muenter, Martin
PA American Cyanamid Co., USA
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 512260	A2	19921111	EP 1992-105887	19920406
EP 512260	A3	19930728		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 05192161	A2	19930803	JP 1992-174325	19920428
US 5270179	A	19931214	US 1992-861762	19920402
CA 2067862	AA	19921031	CA 1992-2067862	19920502
AU 9215959	A1	19921105	AU 1992-15959	19920501
AU 654347	B2	19941103		
US 5919663	A	19990706	US 1995-506247	19950130
US 5661083	A	19970826	US 1995-506247	19950524

PRAI US 1991-695706 19910503
US 1994-204903 19940302
US 1995-380297 19950130
AB Host bacteria carrying deletions in the purA gene (for adenylosuccinate synthetase) are used in host-vector cloning ***vectors*** carrying the purA gene as a selectable marker. The ***vector*** is stabilized by selection and the purA gene also acts as a site for integration of the plasmid. The use of these ***vectors*** does not involve the use of antibiotic resistance markers and is therefore particularly suitable for biotechnological ***processes***. A pUC8-based plasmid carrying the Escherichia coli purA gene and the gene for the nontoxic subunit of the E. coli heat-labile enterotoxin was constructed and introduced into Salmonella dublin, S. typhimurium or Salmonella ***vaccine*** strains carrying deletions in the purA gene and transformants selected on minimal medium. This plasmid was maintained in cultures grown on a minimal medium without loss for 80 generations, but lost rapidly in the absence of selection (1% retention in 40 generations). When the purA gene was used in integrating ***vectors***, the prototrophic phenotype was 100% stable for at least 80 generations in the presence or absence of selection.

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L5 ANSWER 9 OF 7 CAPLUS COPYRIGHT 2001 ACS

FILE 'CAPLUS' ENTERED AT 17:25:07 ON 23 JAN 2001

FILE 'CAPLUS' ENTERED AT 17:25:21 ON 23 JAN 2001
L1 85 S PAPILLOMAVIRUS# AND VACCINE# AND VECTOR# AB,BI
L2 0 S (PAPILLOMAVIRUS# OR PAPILLOMA VIRUS#) AND VECTOR# AB,BI
L3 18 S L2 AND VACCINE# AB,BI
L4 1 S L1 AND L3

FILE 'CAPLUS' ENTERED AT 17:25:59 ON 23 JAN 2001
L5 9 S L4
L6 0 DUP REM L5 (9 DUPLICATES REMOVED)
L7 114 S L3
L8 9 S L7 AND PAPILLOMA(A)V AB,BI
L9 7 DUP REM L5 L7 (9 DUPLICATES REMOVED)
E ELLERSTROM BENGT/AU
E KLEIN GEORGE/AU
E KLEIN GEORGE H/AU
L10 30 S E3-E4
L11 1 S L10 AND PAPILLOMA(A)V AB,BI
E JOCHE JOCHEN/AU
L12 79 S E2-E4
L13 53 S L12 AND PAPILLOMA(A)V AB,BI
L14 11 S L13 AND VACCINE# AB,BI
L15 7 DUP REM L14 (4 DUPLICATES REMOVED)
E GIROUARD MARC/AU
L16 6 S L13 AND VECTOR# AB,BI
L17 6 DUP REM L16 (0 DUPLICATES REMOVED)
E GIROUARD MARC-LUC/AU
L18 626 S E2-E6
L19 547 S L18 AND PAPILLOMA(A)V AB,BI
L20 24 S L19 AND VECTOR# AB,BI
L21 1 S L20 AND PUFF/AU
L22 1 S L20 AND ADENO?/AB,BI
L23 12 DUP REM L20 (12 DUPLICATES REMOVED)
E MUELLER MARTIN/AU
L24 880 S E3-E12
E MUELLER MARTIN T/AU
L25 14 S E4-E7
L26 894 S L24 OR L25
L27 56 S L26 AND PAPILLOMA(A)V AB,BI
L28 5 S L27 AND VECTOR# AB,BI
L29 5 DUP REM L28 (0 DUPLICATES REMOVED)
E MUELLER MARTIN/AB,BI
E MUELLER MARTIN/AU
L30 191 S E3-E7
L31 33 S L30 AND PAPILLOMA(A)V AB,BI
L32 2 S L31 AND VECTOR# AB,BI
L33 1 DUP REM L32 (1 DUPLICATE REMOVED)

FILE 'MEDLINE, BIOSIS, EMBASE, BIOTECHNO, PASCAL' ENTERED AT 17:34:42 ON 23 JAN 2001
L34 35 S PAPILLOMA(A)V(W)(VECTOR# OR VACCINE# OR VIRUS#) AB,BI
L35 6 S L34 AND VECTOR# AB,BI

=> E NHEPATITIS+ L5/BI,AB, DT,CT,TI,PY,PD,PA,CA CAPLUS
ENTERED AT 17:56:27 ON 23
JAN 2001
L36 52 S L35
L37 41 DUP REM L36 (11 DUPLICATES REMOVED)
L38 [illegible] AB,BI
L39 7 DUP REM L38 (2 DUPLICATES REMOVED)

--Logging off of STN---

Executing the logoff script...

LOGOFF

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	28.33	216.50

DISCOUNT AMOUNT (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.94	-12.94

STN INTERNATIONAL LOGOFF AT 17:58:41 ON 23 JAN 2001